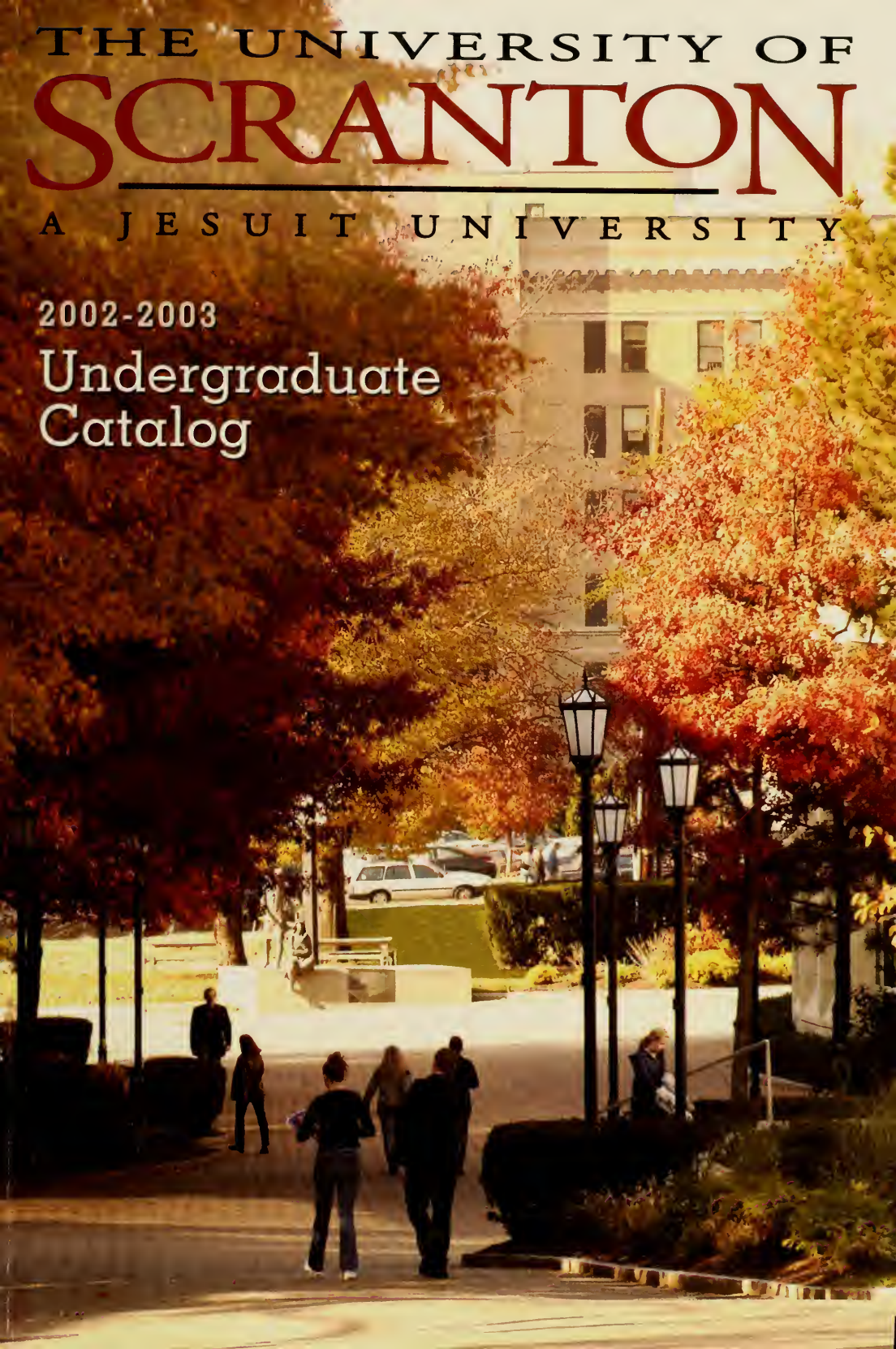
THE UNIVERSITY OF SCRANTON

A JESUIT UNIVERSITY

2002-2003

Undergraduate Catalog



2002-2003 University of Scranton
Academic Calendar

Semesters

Fall 2002		Spring 2003
Aug 22	Dexter Hanley College New Student Orientation	Jan 23
Aug 24	Housing Opens for New Students	
Aug 24	New Student Royal Welcome	
Aug 24-25	New Undergraduate Student Orientation	
Aug 25	Housing Opens for Returning Students at Noon	Jan 26
Aug 25	Royal Welcome/Continuing Students	
Aug 25	Graduate School Orientation	
Aug 26	Classes Begin	Jan 27
Aug 29	Holy Spirit Liturgy	
Aug 30	Last Day to Add Courses	Jan 31
Sep 2	Labor Day, No Classes	
Sep 4	Last Day 100% Refund (non-flat rate only)	Feb 5
Sep 6	Convocation	
Sep 6	Last Day to Request Credit/No Credit Option (Undergrad only)	Feb 7
Sep 11	Last Day 75% Refund (non-flat rate only)	Feb 12
Sep 18	Last Day 50% Refund (non-flat rate only)	Feb 19
Sep 25	Last Day 25% Refund (non-flat rate only)	Feb 26
Sep 25	Last Day to Drop a Class with No Grade	Feb 26
Oct 10	Last Day to Elect Audit Grade Option (Undergraduate)	Mar 7
Oct 10	Incomplete Grades Due	Mar 7
Oct 10	Quarter Ends	Mar 7
Oct 11	University Housing Closes at 6:00 p.m.	Mar 7
Oct 12	Fall/Spring Break Begins	Mar 8
Oct 15	University Housing Re-opens at Noon	Mar 16
Oct 16	Classes Resume after Break	Mar 17
Oct 16	Quarter Grades Due	Mar 17
Oct 19	Graduate School Comprehensive Exams	Apr 5
Oct 27	Honors Convocation	
Nov 6	Last Day to Withdraw with Grade	Apr 10
Nov 26	Last Day of Class before Thanksgiving/Easter	Apr 16
Nov 27	No Classes/University Housing Closes at Noon	Apr 17
Nov 27	Thanksgiving/Easter Holiday Begins	Apr 17
	Easter Sunday	Apr 20
Dec 1	University Housing Re-opens at Noon	Apr 21
Dec 2	Classes Resume after Holiday	Apr 22
Dec 2-5	Last Week of Classes (no exams)	May 5-9
Dec 5	Last Day of Class	May 9
Dec 6	Study Day/s	May 10, 11
Dec 7	Final Exams Begin	May 12
Dec 12	Semester Ends	May 16
Dec 13	University Housing Closes at Noon	May 17
Dec 16	Final Grades Due at Noon	May 20
	Graduate School Commencement	May 24
	Baccalaureate Mass	May 24
	Class Night	May 24
	Undergraduate Commencement	May 25
	University Housing Closes Noon	May 26
	Memorial Day	May 26

SHORT SESSIONS

Intersession 2003		Summer Sessions 2003		
		I	Grad	II
Jan 2	University Housing Opens at Noon	Jun 1	Jun 15	Jul 6
Jan 3	Classes Begin	Jun 2	Jun 16	Jul 7
Jan 6	Last Day to Add	Jun 3	Jun 17	Jul 8
Jan 6	Last Day to Request Credit/No Credit Option	Jun 3		Jul 8
Jan 7	Last Day 100% Tuition Refund	Jun 4	Jun 18	Jul 9
Jan 8	Last Day to Drop/50% Tuition Refund	Jun 5	Jun 19	Jul 10
Jan 16	Last Day to Elect Audit Option (Undergrad)	Jun 13		Jul 18
	Last Day to Register for Graduate Comps		Jun 27	
	Independence Day Holiday, No Class		Jul 4	
	Graduate Comprehensive Exams		Jul 12	
Jan 20	Last Day to Withdraw	Jun 23	Jul 16	Jul 28
Jan. 24-25	Graduate Final Exams	Jun 27-28	Jul 23-24	Aug 1-2
Jan 24-25	Undergraduate Final Exams	Jun 27-28		Aug 1-2
Jan 25	Session Ends	Jun 28	Jul 24	Aug 2
	University Housing Closes at Noon	Jun 29	Jul 25	Aug 3
Jan 29	Final Grades Due by Noon	Jul 2	Jul 29	Aug 7

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THE UNIVERSITY OF SCRANTON UNDERGRADUATE CATALOG 2002-2003

A Community of Scholars
A Culture of Excellence

Volume 87 June 2002
The University of Scranton
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The President and officers of The University of Scranton reserve the right to change the information, regulations, requirements and procedures announced in this catalog; to change the requirements for admission, graduation or degrees; to change the arrangement, scheduling, credit, or content of courses; and to change the fees listed in this catalog.

The University reserves the right to refuse to admit or readmit any student at any time should it be deemed necessary in the interest of the student or of the University to do so and to require the withdrawal of any student at any time who fails to give satisfactory evidence of academic ability, earnestness of purpose, or active cooperation in all requirements for acceptable scholarship.

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The University of Scranton admits students without regard to their race, color, religion, national origin, ancestry, sex or age to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. The University does not discriminate on the basis of race, color, religion, national origin, ancestry, disability, sex or age in administration of its educational policies, admission policies, scholarship and loan programs, and athletic and other school-administered programs.

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If you believe you have been discriminated against because of race, color, religion, national origin, ancestry, sex, age, or handicap or disability, please contact the Director of Equity and Diversity.

It is the personal responsibility of each student to acquire an active knowledge of all pertinent regulations set forth in the UNDERGRADUATE CATALOG.

Within the various schools and colleges the only official interpretations or modifications of academic regulations are those which are made in writing by the dean of the school or college of which the student is a member, or such interpretations or modifications of academic regulations as are approved by the appropriate dean in writing.

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A Community of Scholars
A Culture of Excellence

The University of Scranton is a community of scholars whose ministry of education is informed by the vision of life contained in both the Gospels and the Spiritual Exercises of Saint Ignatius Loyola. The University is therefore dedicated to freedom of inquiry, the pursuit of wisdom, integrity and truth, and the personal growth and development of all who share in its life and ministry.

THE SEAL OF THE UNIVERSITY OF SCRANTON

The principal colors of the shield are the traditional colors of the University, white and royal purple. On the purple field there is a horizontal silver bar, containing, in purple, a star taken from the seal of the Brothers of the Christian Schools and from the seal of Saint Thomas College, predecessor of the University, and two stacks of wheat from the obverse of the coat of arms of the Commonwealth of Pennsylvania.

The upper half of the shield contains, in gold, two wolves grasping a cauldron suspended from a chain; they are taken from the coat of arms of the family of Saint Ignatius Loyola, and they identify the University as a Jesuit institution. Below the silver bar is a golden rising sun, symbolic of Saint Thomas Aquinas, the shining light of the Church and the Patron of the University.

Indicating the Diocese of Scranton and William Penn, founder of the Commonwealth, the black border of the shield reproduces the border of the shield of the Diocese and the silver hemispheres are taken from William Penn's coat of arms.

The crest is a golden cross of the particular style known as Patonce. It symbolizes Christ, the goal and the norm of the University's educational efforts, and it complements the motto which the University has had since its foundation: *Religio, Mores, Cultura.*

HISTORY OF THE UNIVERSITY

The University of Scranton was founded as Saint Thomas College by Bishop William O'Hara, the first Bishop of Scranton, who had always hoped to provide an opportunity for higher education in the Lackawanna Valley. In August of 1888, with few resources at hand, he blessed a single block of granite as a cornerstone for his new college, which would admit its first students four years later. That first cornerstone is preserved in the wall of St. Thomas Hall located at the corner of Linden Street and Monroe Ave.

The college was staffed by diocesan priests and seminarians until 1896 and then, for one year, by the Xaverian Brothers. From 1897 until 1942 the school, which was renamed The University of Scranton in 1938, was administered for the Diocese by the Christian Brothers. In the late summer of 1942, at the invitation of Bishop William Hafey, 18 Jesuits, led by Rev. Coleman Nevils, S.J., the newly appointed president, arrived on campus to assume control of the University.

The Jesuits restructured and strengthened Scranton's traditional and pre-professional programs with an emphasis on the liberal arts, which are the foundation for every program at a Jesuit university. This emphasis is intended to give students an appreciation for all disciplines as they develop specific subject knowledge.

The University has flourished under the Jesuits, growing from a primarily commuter school with fewer than 1,000 students to a broadly regional, comprehensive university with a total enrollment of over 4,500 students in undergraduate, graduate, and non-traditional programs.

As it enters the twenty-first century, the University is building on its historical and educational heritage, guided by a 2000-2005 Strategic Plan entitled *A Community of Scholars – A Culture of Excellence* and a 20-year Facilities Master Plan also adopted in 2000.

The University remains committed to enriching the quality and variety of its academic offerings with recent additions in such fields as Electronic Commerce, Human Resources and Enterprise Management Technology. In addition, it continues to invest in its physical plant with 18 buildings added to campus over the past 18 years. New construction since 1998 has included McGurrin Hall, a four-story home for the Panuska College of Professional Studies; Mulberry Plaza, four 10,000 sq. ft. townhouses; and Brennan Hall, a 71,000 sq. ft. building that provides technologically advanced classroom and office space for the Kania School of Management. (The fifth floor of Brennan Hall is home to the Executive Center, an educational resource for Northeastern Pennsylvania.)

The academic quality and distinctive experience of a Scranton education are consistently recognized through high rankings in such national publications as *U.S. News and World Report, Barron's Guide to the Most Prestigious Colleges. Yahoo Internet Life* Magazine applauded the University's commitment to technology by ranking it 43rd among comprehensive and research institutions in the nation. In addition, in 2000, the University was one of 100 institutions to be named to the Templeton Foundation's Honor Roll of Character Building Colleges.

University graduates continue to be accepted into medical and law school at rates well above national averages, including a medical-school acceptance rate of over 90% in 2001 and 2002. In addition, the University has received national recognition for the high number of graduates who have received Fulbright and other prestigious international fellowships - 109 since 1972.

THE CAMPUS

The University's 54-acre campus is located in the heart of Scranton, a community of 80,000 within a greater metropolitan area of 750,000 people. In the last 15 years, the University has built, renovated or expanded more than 20 buildings on campus.

The 426,347-volume Harry and Jeanette Weinberg Memorial Library at the center of campus includes a large study area open 24 hours a day with internet connectivity to the world. Loyola Hall of Science and St. Thomas Hall have highly specialized laboratories and equipment for the study of physics, electrical engineering, computing sciences, chemistry, biology and molecular biology. There is also a fully equipped television studio with editing facilities in the Communications Wing of St. Thomas Hall, along with the broadcast studios of WUSR-FM.

The John J. Long, S.J., Center and the adjoining William J. Byron, S.J., Recreation Complex house the departments of Athletics and Exercise Science and Sport. They also have facilities for intercollegiate and intramural basketball, wrestling, handball, tennis, racquetball, volleyball and swimming. Fitzpatrick Field is home to men's and women's soccer, lacrosse, and field-hockey teams and its lighted artificial turf is also used for intramural and club sports.

Thirteen traditional residence halls, primarily for freshmen, are centered on terraced quadrangles at the core of the campus. Francis E. Redington Hall and John R. Gavigan Hall provide housing for upper-class students and the University also maintains a series of houses and apartment buildings in the vicinity of campus, some of which are organized around academic interests. In all, there are more than 30 housing options for students, who are guaranteed University housing for four years.

The most recent addition to University Housing is the Mulberry Plaza. The Plaza is a complex of four apartment buildings that contain three- and five-bedroom apartments, and a five-occupant, two-story townhouse unit. All units contain kitchens, combined living and dining areas, one or two bathrooms, and bedrooms.

Performance and rehearsal space for the University Bands and Choirs is in the Houlihan-McLean Center, and the McDade Center for Literary and Performing Arts includes a "black box" studio theatre and a 300-seat main theater, classrooms, a writing laboratory, and offices for the English Department. The Eagen Auditorium in the Gunster Memorial Student Center is used for performances, lectures and formal and informal University events.

McGurrin Hall houses The Panuska College of Professional Studies, and contains classrooms, laboratories, an academic advising center, and offices for the departments of Counseling and Human Services, Education, Health Administration, Human Resources, and Nursing. Physical Therapy and Occupational Therapy classrooms and laboratories are in adjacent Leahy Hall.

Brennan Hall is our newest academic building. This 69,500-square-foot facility located in the center of campus provides offices, classroom and support facilities for the Kania School of Management. Also in Brennan Hall is a 128-seat auditorium and seminar rooms. The Executive Center on the fifth floor of Brennan includes conference and meeting rooms that are technologically equipped, as well as a dining and kitchen area.

The Conference and Retreat Center is located 15 miles north of the campus on Chapman Lake.

Other notable campus buildings include The Estate, former residence of the Scranton family; Campion Hall, built by the Society of Jesus for its members in Scranton; The Center for Eastern Christian Studies with its 150,000-volume library, rare-book collection and Byzantine Rite Chapel; Kathryn and Bernard Hyland Hall, which houses classrooms and the University Bookstore; and recently renovated O'Hara Hall.

THE MISSION STATEMENT OF THE UNIVERSITY OF SCRANTON

Historical Prologue:

A comprehensive, co-educational institution, The University of Scranton is, by tradition, choice and heartfelt commitment, a Catholic and Jesuit university. Founded in 1888 as Saint Thomas College by the Most Reverend William G. O'Hara, D.D., the first bishop of Scranton, it achieved university status in 1938, and was entrusted to the care of the Society of Jesus (the Jesuits) in 1942.

The Mission of the University:

The University of Scranton is a community of scholars whose ministry of education is informed by the vision of life contained in both the Gospels and the Spiritual Exercises of Saint Ignatius Loyola. The University is therefore dedicated to freedom of inquiry, the pursuit of wisdom, integrity and truth, and the personal growth and development of all who share in its life and ministry.

The Character of the University:

As a Catholic university, The University of Scranton sees in the teaching and example of Jesus Christ the primary source for the values and attitudes that imbue the culture of its campus. Thus, it seeks to communicate the fullness of the Catholic intellectual tradition to its students in a systematic way. Moreover, in the ecumenical spirit that it has manifested since its founding, the University invites faculty, staff and students from other religious traditions to share in its mission.

As a Jesuit university, The University of Scranton provides its students with a nurturing environment in which a value-laden curriculum challenges them to develop:

– a commitment to the value system contained in the Gospels,
– a principled respect for the dignity of the human person,
– a devotion to justice,
– a dedication to the service of the poor,
– a love of truth and a restless passion for learning.

Convinced that the search for truth necessarily involves the search for God, the University also provides its students with opportunities for worship and spiritual development, and for the academic study of theology, religion and religious experience.

As a university dedicated to education in the liberal arts, The University of Scranton requires that all of its students complete a rigorous curriculum designed to foster the development of their analytical and critical abilities. Thus, the core curriculum of the University seeks to impart to students a knowledge of scientific principles, methods and skills, an appreciation of literary and artistic expression, an awareness of historical perspectives, and an understanding of religious, philosophical and moral values.

As an urban American university, The University of Scranton is dedicated to educating "men and women for others," from a wide variety of backgrounds, whose lives and talents will enrich the life of the human family. The University is committed to enrolling a culturally and racially diverse student body from all areas of the country and the world. In fulfillment of its mission, the University further seeks to attract faculty members from richly diverse backgrounds who share its commitments to excellence in teaching and research, to "cura personalis" (a loving concern for students), and to the incarnational vision of human life that informs its ministry.

As a comprehensive university, The University of Scranton offers certificate and degree programs on both the undergraduate (associate and baccalaureate) and graduate (master's) levels to traditional and non-traditional students. Moreover, in order to prepare them for careers in a variety of fields, the University offers its students a wide range of professional and pre-professional programs of study.

As the oldest and largest university in Northeastern Pennsylvania, The University of Scranton is firmly committed to serving the people of the region. This commitment is manifested in a special way through the University's dedication to the education of future leaders for the area's professional, political, religious, cultural and business communities.

Throughout its history, the University has been distinguished by its commitments to liberal arts education, excellence in teaching and the quality of care that it lavishes on its students. As it moves into the new millennium, the University reaffirms its commitment to these qualities and invites venturesome scholars and students to join in its mission in the service of wisdom, integrity and truth.

A FACULTY OF TEACHERS AND SCHOLARS

Over 250 faculty and administrators participate in the University's educational enterprise. They hold degrees from 135 different universities in 30 countries on five continents. Cambridge and the University of London in England; Louvain and the Gregorian in Europe; the University of Calcutta in India; Sophia University in Japan; Soochow University in China; Berkeley, Yale, MIT, Notre Dame, Harvard and Georgetown in America — all are represented among the faculty.

By its nature and function, a university faculty constitutes the most cosmopolitan element in a community. Hindu and Muslim, Christian and Jew, ministers and rabbis — scholars and teachers all — are found on the University's faculty.

The Jesuit tradition is carried on at the University not only by the 25 Jesuits engaged in teaching or administration, but by the fact that almost half of the faculty hold at least one degree from a Jesuit college or university.

As indicated in the Mission Statement, excellent teaching and scholarship are regarded as complementary at this institution. Evidence of the latter is seen in the fact that numerous faculty serve on editorial boards of national and international journals, and two have served as principal editors — Prof. David Friedrichs, *Legal Studies Forum*; and Dr. John Norcross, *In Session: Journal of Clinical Psychology*. Further, Fr. Richard Rousseau, S.J., is the founding editor of Ridge Row Press, which in 1988 expanded to become the University of Scranton Press and which specializes in philosophical and theological publications.

The University Directory near the end of the catalog presents more detailed information about the faculty.

STUDENT DIVERSITY AND PARTICIPATION

As our faculty come from around the world, so do our students. Twenty-seven states and twenty-two foreign countries are represented in the University's student body of 4,600. In turn, through the Fulbright and Foreign Study programs, University of Scranton students matriculate at such foreign universities as Oxford, Leuven, Madrid, Tubingen, Mainz, Oslo, Fribourg, Cologne, Salamanca, Lancaster, Berne, Strasbourg, the Sorbonne and University College, Dublin. This interchange of students contributes to the diversity and intellectual life of the University.

Much of the work in this university community is accomplished through student input. Considerable scientific research at the University is done by undergraduate students in the laboratories and in the field. With faculty assistance, the University newspaper and yearbook are edited and managed by students, and students publish articles and abstracts in national scholarly journals. Students work in the public-relations and admissions offices, computer center, as resident assistants in the dormitories, as research assistants and interns for deans and the registrar. Similarly, they participate in the University's decision making. Seven students are elected by the student body to serve on the University Senate. Others serve with departmental chairpersons and faculty on the Conferences which recommend to the Deans changes in academic programs. Students also serve with other members of the University community on the various search committees which recommend candidates for the principal administrative posts from President to Dean.

ALUMNI SOCIETY

The University of Scranton Alumni Society provides a way for graduates to continue their participation in the life of the University after their student years. Its 20 alumni chapters and affiliates include more than 35,000 members. The Society, which is governed by elected officers and a 28-member Board of Governors, fosters communication among alumni

and encourages continued dialogue between alumni and the University community. It hosts alumni functions, including reunions and homecomings, and promotes the interests of the University by identifying prospective students, assisting the placement of graduates, collecting and preserving materials for University history, encouraging networking among its membership, providing numerous services and benefits, performing community service projects, and honoring student, faculty and alumni accomplishments. These activities are coordinated through the office of alumni relations on campus.

The excellent record of Scranton alumni in gaining acceptance to professional schools , including the nation's most prestigious, is documented in the Health Professions and Pre-Law sections later in this catalog.

INDICES OF QUALITY AND ACHIEVEMENT

PROMINENT GRADUATES

Working with dedicated faculty and staff to maximize their potential, students at The University of Scranton become achievers. Of the more than 35,000 alumni, the following might in particular be mentioned:

Patrick Cardinal O'Boyle ('17), archbishop of Washington; Michael J. Eagen, Sr. ('27), chief justice of the Pennsylvania Supreme Court; Dr. Clarence Walton ('37), first lay president of The Catholic University of America; Hon. John D. Butzner ('38), judge, U.S. Circuit Court of Virginia; Joseph Ostrowski ('38), major league pitcher, New York Yankees (1948-52); John C. Keeney, Esq. ('47), deputy assistant attorney general, U.S. Department of Justice; Arthur W. Brown, Ph.D. ('37), former president of Marygrove College and Adelphi University; Joseph J. Loferski, Ph.D ('48), physicist and pioneer in the development of solar cells currently used in items from portable calculators to commercial satellites; Joseph Austin ('52), president/chief executive officer, General Life Insurance, Chicago; Gerard R. Roche ('53), chairman of the board, Heidrick and Struggles, Inc.; Claude R. Martin, Jr. ('54), professor of marketing, School of Business Management, University of Michigan; Dr. Glynn Lunney ('55), lead flight director for historic moon flights of Apollo 11 through 15; Dominic Cossa ('57), leading baritone, Metropolitan Opera; Maj. Gen. John Herrling ('60), secretary, American Battle Monument Commission; Jason Miller ('61), winner of the 1973 Pulitzer Prize in Drama for *That Championship Season* and "Oscar" nominee for his role in *The Exorcist*; Paul Montrone ('62), chief executive officer and president, Fisher Scientific International, Inc., a Fortune 500 Company; Hon. Michael J. Collins ('62), State Senator, Maryland; Francis J. Castellino, Ph.D. ('64), dean of the College of Science, University of Notre Dame; Gene Gibbons ('64), former chief White House correspondent; Edward J. Lynett ('65), publisher, *Scranton Times/Scranton Tribune* newspapers; James J. Loftus, M.D. ('66), director/part-owner of Emergency Medicine, Cedar Sinai Hospital, Los Angeles; John A. Walsh ('66), executive editor, ESPN; Walter J. Bobbie ('67), Broadway musical director and Tony Award winner; Christopher Condron ('70), president and CEO, AXA Financial Inc.; Stanley Wojewodski, Jr., Ph.D. ('70), dean, Yale School of Drama; William J. Wilkinson ('71), senior vice-president, human resources, Walt Disney Company; Susan Swain ('76), executive vice-president and co-chief operating officer, C-SPAN Cable Network; Dennis Size ('76), Emmy Award winning television lighting director; Debra Langan ('78), vice-president, American Express; and John J. Lynch, III ('83), chief executive officer and president, St. Luke's Hospital and Medical Center, Houston, TX; Robert Stephen Weiss ('62), executive vice president and CFO of the Cooper Company, Inc.; Paul Gillette ('59) (deceased), novelist, screenwriter, best-known book *Play Misty For Me*, made into a movie by Clint Eastwood, also noted wine expert and creator of first national television program on wine; William Gerald Connolly ('59), co-author of *The New York Times Stylebook*; James Papada, III ('70), chairperson, president and CEO of Technitrol, Inc.; Thomas J. Wonsiewicz ('67), president of

Lane Enterprises, Inc.; Robert J. Chaney ('70), CEO and president of UGI Utilities, Inc.; Kathleen Curry Santora ('80), chief executive officer, National Association of College and University Attorneys.

TRUMAN AND OTHER NATIONAL SCHOLARSHIPS

In recent years students from The University of Scranton have won a number of highly competitive national fellowships, including those offered by the Mellon Foundation, the Danforth Foundation, the National Science Foundation, and the Harry S. Truman Memorial Foundation. Four University of Scranton students have been awarded Truman scholarships, including Gregory Garger (1980), Maria Mascaro (1984), Carla Mascaro (1987), and Stephanie Tessing (2002). In 1988, Alice Batt, a double major in English and philosophy, received a summer study grant through the National Endowment for the Humanities.

BACCALAUREATE SOURCE OF Ph.D.s

Achievement is also recognized in a recent study of the Office of Institutional Research at Franklin and Marshall College which showed that over a 75-year period (1920-1995), The University of Scranton ranked 22nd out of 254 four-year, private, master's-degree-granting institutions as the baccalaureate source of Ph.D.s in all fields.

RETENTION AND DEVELOPMENT OF STUDENTS

The Mortenson Research Seminar on Public Policy national research team has concluded that some colleges, including The University of Scranton, are far more successful than others at encouraging students to do better academically than their high school grades or SAT/ACT scores alone may predict.

The team which conducted the study attributes the differences between predicted and actual graduation rates to internal institutional factors.

The University of Scranton placed 39th among 1,100 American colleges and universities ranked by the difference between the predicted and actual number of freshman students graduating in six years. The University's 84 percent institutional graduation rate in 1995 was 17.5 percent higher than statistical predictions based on external influences such as grade and test scores, average student age, or off-campus vs. on-campus resident status.

The University of Scranton was among the 160 colleges and universities in the country whose graduation rate was more than 10 percent above predicted levels. Researchers found that "a substantial number" of Catholic colleges and universities appeared near the top. Even so, The University of Scranton ranked higher than any of the other 27 Jesuit colleges and universities in the United States.

Since 1994, *U.S. News & World Report* has named the University among the top ten comprehensive universities in the North (the most competitive by its annual survey of "America's Best Colleges"). The University has consistently been included in the *U.S. News* rankings since they were first introducted in 1983.

In recognition of its work as a values-centered institution, the University is one of 100 American schools named to the John Templeton Foundation's *Honor Roll of Colleges That Encourage Character Development.* The foundation made special note of the integration of academics and student life as expressed in the University's curriculum and co-curricular activities, mentioning especially the Freshman Seminar, Collegiate Volunteers, Campus Ministries and the peer counseling and education programs in the Wellness Center.

FULBRIGHT AND OTHER INTERNATIONAL FELLOWSHIPS

Over the last 31 years, 109 Scranton students have accepted grants in the competitions administered by the Institute of International Education (Fulbright) and International Rotary. In 2001 the University celebrated its 100th. winner in the competition for prestigious Fulbright Fellowships—the U.S. Government's premier scholarship for foreign study and research.

To date, one Scranton student has been awarded a Fulbright Fellowship for the 2002-2003 academic year, and one has been awarded a Rotary Ambassadorial Scholarship. Nicole Negowetti, a political science major, will pursue a Master's degree in Peace and Conflict Resolution at the University of Limerick in Ireland on her Rotary Scholarship. Kristy Petty, an international business and Spanish double major, will examine the impact of Mercosur on the strategies of leading firms in Argentina's automobile and foodstuffs industries during her Fulbright Fellowship in Buenos Aires.

Seven Scranton students spent the 2001-2002 academic year overseas on prestigious postgraduate fellowships. Maria Atzert spent the year teaching English as a second language as a Fulbright Teaching Assistant in South Korea. Lisa Biagiotti was a Fulbright Fellow in Italian history at the University of Rome. Erin Friel taught English and American studies at a high school in Germany on her Fulbright Teaching Assistantship. Carol Gleeson examined the interactions of bat species in the forests of Paraguay during her Fulbright Fellowship. Nicole Heron spent the year at the Turku School of Economics and Business while a Fulbright Fellow in Finland. Sean St.Ledger studied in Padua , Italy on his Rotary Ambassadorial Scholarship. Finally, Clifford McMurray spent his Fulbright year studying international business at the Hochschule Bremmen in Germany.

Dr. Susan Trussler of the Economics/Finance department is the University's Fulbright Program Adviser.

AWARDS FROM INSTITUTE OF INTERNATIONAL EDUCATION FULBRIGHT PROGRAM AND INTERNATIONAL ROTARY, 1980-2002

1980	Veronica Cardiff	Germany
	Stephen Carlin	Chile
	Michael Corbley	Switzerland
	Maryann L. Heckman	Uruguay
	Helen Hricko Haney	Germany
1981	Patrick Cumberland	Uruguay
	Arlene Drack (ITT)	Norway
	Deborah Krzywiec	Germany
	Irene Mlodzinski	Switzerland
	Mark Wisniewski	Switzerland
	Brian Wynne	Germany
1982	Michael Kondracki	Peru
	Bernadine Brennan-Moglia (ITT)	Finland
	Kathleen Flanagan	Belgium
	Joseph Piccirilli	Germany
	Howard Sorensen	Uruguay
	Elizabeth Veca	Switzerland
	Leon Xavier Zawacki	Germany
1983	Erin Brennan	Germany
	Patrick Davies (ITT)	Chile
	Peter Regeski	France
	Joseph Tuncavage	Switzerland
	Christopher Wahren	Germany
1984	Robert Conforti	Switzerland
	Kathleen Flanagan	France
	Colette Mazzucelli	Switzerland
1985	John Beltrami	Switzerland
	Michele Gieger	Germany
	Marguerite Pedley	New Zealand
	Louise Vogel	Germany
1986	Margaret Husosky	New Zealand
	James Lavelle	Thailand
	Christopher Montone	Honduras
	Robert Rabecs	Philippines
	Janet Schubert (Rotary)	Belgium
	DeLoris Spegar	Singapore
	Roy Whitman	Switzerland
	Ann Marie Laskiewicz Ross	South Africa
1987	Susan Conway	Germany
	Kathleen Gallagher (Rotary)	Nepal
	Margaret Keen	France
	Kevin Wright	Finland
1988	Michel Aboutanos	Switzerland
	Jeffrey Gabello	Germany
	Christine O'Brien	Kenya
	Mary Yuen	Singapore

1989	Kim Marie Newak	Germany
1990	Caroline Parente	Uruguay
1991	Daniel Jurgelewicz	Finland
	Thomas Spoto	Singapore
1992	Maureen Cronin	South Korea
	Alissa Giancarlo	Germany
	Thomas Kish	Hungary
	Jennifer Murphy	Denmark
	Neal Rightley	Germany
	Salvatore Tirrito	Finland
	Denise Udvarhely	New Zealand
1993	Timothy Gallagher	New Zealand
	Susan Kavalow	South Korea
	Jennifer Kelly	Uruguay
	Alan Landis	Colombia
	Beth LiVolsi	Italy
	Colleen McInerney	Australia
	Jennifer Seva	Argentina
1994	Margaret Mary Hricko	Spain
	Terrence Kossegi	Pakistan
	Karis Lawlor	Germany
	Brian Zarzecki	Namibia
1995	Jason Cascarino	New Zealand
	Jeffrey Greer	Sri Lanka
	Renee Kupetz	Germany
1996	Robert Brennan	Israel
	Michael Pagliarini	France
	Michael Tracy	New Zealand
1998	Kevin Bisignani	Germany
	Jennifer Cahill	Japan
	Matthew Pierlott	South Korea
	Karen Towers	Mauritius
1999	Alison Glucksnis	Japan
	Katherine Roth	United Kingdom
	Christopher Warren	Guatemala
2000	Lisa Angelella	India
	Amy Patuto	South Korea
2001	Maria Atzert	South Korea
	Lisa Biagiotti	Italy
	Erin Friel	Germany
	Carol Gleeson	Paraguay
	Nicole Heron	Finland
	Clifford McMurray	Germany
	Sean St. Ledger (Rotary)	Italy
2002	Kristy Petty	Argentina
	Nicole Negowetti (Rotary)	Ireland

HONOR SOCIETIES

Those National Honor Societies which are represented in The University of Scranton are listed below in order of the foundation of the local chapters. An asterisk (*) after the name indicates that this national honor society is a member of the Association of College Honor Societies.

ALPHA SIGMA NU*

The National Jesuit Honor Society was founded in 1915 with chapters in 28 Jesuit universities throughout the United States. The Scranton chapter was founded in 1943, the oldest Honor Society in the University. It is the only Honor Society open to students and faculty in all disciplines and all colleges of the University. Its admission standards are the most rigorous. The Greek letters signify adelphotes skolastikon nikephoron – brotherhood of honor students. Juniors and seniors who have distinguished themselves in scholarship, loyalty and service are eligible for membership. Appointment is made by the president of the University on the recommendation of the moderator and nomination by chapter members of the Society.

The Society annually presents the Alpha Sigma Nu University award for teaching. The recipients of the Award:

1969 Prof. Lawrence Mann †
1970 Prof. Frank Brown †
1971 Dr. Thomas Garrett †
1972 Dr. Michael DeMichele
1973 Prof. Bernard Williams
1974 Rev. Bernard Suppe, S.J.
1975 Rev. Edward Gannon, S.J. †
1976 Dr. Robert A. Sallavanti
1977 Prof. John P. McLean †
1978 Dr. Charles J. Thoman
1979 Dr. Urban von Wahlde
1980 Dr. J. Brian Benestad
1981 John J. McGee, Esq.
1982 Dr. Harold Baillie
1983 Dr. E. Springs Steele
1984 Dr. John Earl †
1985 Dr. Michael C. Cann
1986 Dr. Joseph T. Evans
1987 Dr. Richard Klonoski
1988 Rev. Ronald H. McKinney, S.J.
1989 Dr. Stephen Whittaker
1990 Dr. Brian W. Carpenter
1991 Dr. Susan Mathews
1992 Dr. Willis M. Conover
1993 Dr. Robert L. McKeage
1994 Dr. Robert E. Hueston
1995 Dr. Gary E. Mattingly
1996 Dr. Kathleen G. Dwyer
1997 Dr. William Rowe
1998 Sr. Mary Anne Foley, C.N.D.
1999 Rev. Robert J. McTeigue, S.J.
2000 Dr. Thomas P. Hogan
2001 Dr. Anthony P. Ferzola
2002 Rev. Timothy J. Cadigan, S.J.

† deceased

PHI ALPHA THETA*

International Honor Society in history founded in 1921. Basic requirements: 12 credits in history; grade-point average of 3.33 in history and overall ranking in top 35% of class. The Mu Rho chapter was established at the University in 1967.

SIGMA PI SIGMA*

National Honor Society in physics for undergraduate and graduate students, founded in 1921. Its chapters are restricted to colleges and universities of recognized standing which offer a strong physics major. The University's chapter was founded in February, 1969.

OMICRON DELTA EPSILON*

National Honor Society in economics. Basic requirements: 12 credit hours in economics with an overall grade-point average of 3.0 and a 3.0 average in economics. The University's Xi chapter of Pennsylvania was founded in May, 1969.

PSI CHI*

National Honor Society in psychology founded in 1931. This organization has chapters in 974 colleges and universities in all 50 states. The University's chapter was installed in May, 1969. Minimum qualifications include a major or minor in psychology, rank in the top 35th percentile in general scholarship, and superior scholarship in psychology.

PHI DELTA KAPPA

International professional fraternity for men and women in education. Membership is limited to graduate students and teachers. The University's chapter was founded in 1970.

PI GAMMA MU*

International Honor Society in social science. Founded in 1924 to improve scholarship in the social sciences and to encourage inter-disciplinary study. Basic requirements: at least 60 hours of academic work, an overall grade-point average of at least 3.25, with at least 21 hours in the disciplines of economics, human services, psychology, sociology, political science or history with a grade-point average of at least 3.33. The University's chapter was founded in 1971.

ALPHA SIGMA LAMBDA

National Honor Society to encourage scholarship and leadership among adult students in continuing higher education. The Alpha Upsilon chapter was installed at the University in 1972.

ETA SIGMA PHI

National Honor Society for students of classical languages. The University's Epsilon Gamma chapter was founded in November, 1972.

PI MU EPSILON

National Honor Society for mathematics majors in junior or senior year with a grade-point average of 3.0 and a 3.0 average in mathematics. The University's Mu chapter was installed in February, 1973.

ALPHA MU GAMMA

National Honor Society for students of foreign languages. Founded in 1931. The Greek letters signify *amphi mouse glosson*: for the muse of languages. The University's chapter of Theta Iota was installed in May, 1973.

DELTA SIGMA RHO-TAU KAPPA ALPHA*

National Honor Society in forensics. Founded in 1963 through merger of societies

founded in 1906 and 1908 respectively. The University's chapter was installed in 1975.

PHI LAMBDA UPSILON

National Honorary Chemical Society established in 1899. The University's Beta Kappa chapter, one of 60 chapters nationwide, was installed in October, 1975. For students with 24 credits in chemistry and a 3.0 grade-point average.

ALPHA EPSILON DELTA*

The National Premedical Honor Society founded in 1926. The University's Iota chapter was installed in May, 1976.

SIGMA XI

International Honor Society in scientific research founded in 1886. The University's chapter was chartered in 1968 and has been authorized since 1979 to induct as associate members undergraduate or graduate students showing outstanding promise in original research.

THETA ALPHA KAPPA*

National Honor Society in theology and religious studies founded in 1976 at Manhattan College. The University's Alpha Nu chapter was installed on April 4, 1980. Membership requires 12 credits in theology with a 3.5 grade-point average.

SIGMA TAU DELTA*

National Honor Society in English founded in 1924. This organization is for students who major or minor in English with a grade-point average of 3.5 in English and 3.4 overall. The University's Mu Omicron chapter first met on April 30, 1980.

ALPHA EPSILON ALPHA

An honor society founded on April 30, 1980, at The University of Scranton to recognize students who excel in the field of communications. For communication majors with a 3.5 grade-point average.

ALPHA KAPPA DELTA*

International Honor Society for Sociology students founded in 1920. Requirements include 18 credits in sociology with a grade-point average of 3.0 overall. The University's Upsilon chapter was founded on May 8, 1980.

PI SIGMA ALPHA*

National Honor Society in political science founded in 1920. The Kappa Iota chapter at the University was installed on May 9, 1980. Membership limited to students with at least 10 credits in Political Science, a grade-point average of at least 3.4 in these courses, and overall rank in the upper third of the class.

ALPHA PHI SIGMA*

The National Criminal Justice Honor Society founded in 1942. The University's Epsilon Zeta chapter was installed in May, 1982. Basic requirements: 18 credits in criminal justice; an overall grade-point average of 3.2; a 3.2 grade-point average in criminal justice.

PHI SIGMA TAU*

National Honor Society for students of philosophy. The University's Tau chapter was installed in May, 1982.

OMEGA BETA SIGMA

The Business Honor Society for women founded at The University of Scranton in

1982. Basic requirements: at least sophomore standing, Business as a major or minor and a grade -point average of 3.25.

UPSILON PI EPSILON

National Computer Science Honor Society. The University's Gamma chapter was chartered in the spring of 1985.

SIGMA THETA TAU*

International Honor Society of Nursing was founded in 1922 and is a prestigious organization of nurse leaders, scholars and researchers. Requirements: completion of one half of the curriculum, demonstrated ability in nursing, a grade-point average of 3.0 and rank in the upper one-third of the class. The University's Iota Omega Chapter was chartered in April, 1988.

KAPPA DELTA PI

The International Honor Society for education established in 1911, the Sigma Chi chapter was installed here at The University of Scranton in 1992. It joins over 500 chapters from around the world in dedication to the ideals of fidelity in Humanity, Science and Service, and Toil.

BETA BETA BETA

National Honor Society for biology founded in 1922. The University's chapter, established in 1994, is one of 372 chapters nationwide. The society encourages undergraduate biological research through presentations at conventions, publication in the journal BIOS, and research/travel grants. All undergraduate students interested in biology may join as associate members. A regular member must be a junior or senior with 3.0 grade-point average in at least three biology courses (one upper level) and in good academic standing at the university.

SIGMA PHI OMEGA

The National Honor Society in gerontology. Founded in 1980, its purpose is to recognize those students who excel in gerontology as well as professional aging-service personnel. The University's Gamma Epsilon chapter was established in April, 1997. Membership is open to students who have at least eighteen credits completed in gerontology/aging studies with a grade-point average of 3.3.

BETA GAMMA SIGMA*

Beta Gamma Sigma is the only business honor society recognized by the AACSB, the International Association for Management Education. Basic requirements: ranking in the top 10% of the class with a major in business and management programs. The University's chapter of Beta Gamma Sigma was chartered in spring, 1997.

LAMBDA PI ETA

The National Honor Society for Communication majors founded in 1985 to honor and encourage high levels of scholarship and leadership in the field of Communications. The University chapter was installed in 1999. Membership requires junior-level status, at least 12 credits and a grade point average of 3.25 in communication studies, and a cumulative grade point average of 3.0.

ALPHA LAMBDA DELTA

The National Honor Society of Freshmen, Alpha Lambda Delta was founded in 1924 to honor eccellent academic achievement by students in the first year of study. The Richard H. Passon Chapter of the Society was installed at the University on March 24, 2001. Membership requires enrollment as a full-time student in a degree program, and a grade point average of 3.5 or above at the end of the first semester of the freshman year.

Undergraduate Admission
Expenses
Financial Aid

The University of Scranton is a selective institution in the Jesuit tradition. The University makes available to qualified students an excellent education and it offers significant scholarships and programs of financial aid.

ADMISSION

The Admissions Committee of The University of Scranton will make the final decision on applications for admission. In reaching this decision, the committee will consider a number of factors: demonstrated evidence of a student's academic ability, intellectual curiosity, strength of character and motivation; the student's high school record, class rank, and extracurricular activities; SAT and/or ACT scores.

STEPS IN SUBMITTING MAKING APPLICATION

Requests for an application form and all correspondence dealing with admission to The College of Arts and Sciences, The Panuska College of Professional Studies or The Kania School of Management should be directed to:

DIRECTOR OF ADMISSIONS
THE UNIVERSITY OF SCRANTON
SCRANTON, PENNSYLVANIA 18510
Telephone: (570) 941-7540 Toll Free: (888) SCRANTON Fax: (570) 941-5928
Or apply online at www.scranton.edu/admissions

A non-refundable fee of $40.00 should accompany the application. No fee is charged for on-line applications submitted via the University web site. Students should apply during the first semester of their senior year of high school. The early-action deadline is November 15th. For all applicants other than those in Physical Therapy, early-action offers will be made on December 15th. From that time on, all applications will be reviewed on a rolling basis with a four-week turn around and a preferred final application deadline of March 1st. All Physical Therapy applications must be completed and received by December 15th for a January 15th decision and a February 15th priority confirmation.

The application form should be completed and the entire form given to the guidance counselor of the high school who will forward high school grades to the University.

The SAT I: Reasoning Test (College Entrance Examination Board) or the ACT Test (American College Testing) is required of all applicants. These tests should be taken during the junior year and/or senior year of high school. During Summer Orientation, the University administers its own placement tests. Therefore, applicants are not required to take the SAT II.

A non-refundable class reservation fee of $150.00 is required of all accepted applicants. In addition, accepted resident freshmen will make a non-refundable room deposit of $150.00 upon notice from the Director of Admissions.

Occupational Therapy and Physical Therapy applicants must submit documentation attesting to observation work done in their chosen field.

REQUIRED HIGH SCHOOL PREPARATION

Students wishing to enroll in any of several undergraduate programs offered by the University must have completed a total of 16 or more high school academic units covering grades 9-12. The term "unit" means a high school course taught four or five hours weekly throughout an academic year of 36 weeks duration. Unit requirements and preferred distribution of secondary courses are given in the following table:

	COLLEGE PROGRAM CHOICE					
HIGH SCHOOL UNIT	Arts		Business, Science, OT, PT, or Engineering		Education, or Social Science	
	Req.	Pref.	Req.	Pref.	Req.	Pref.
English	4	4	4	4	4	4
History and Social Science	2	3	2	3	2	3
Foreign Language	2	2+	2	2+	2	2+
College Preparatory Mathematics	3	4	4	4	3	4
Science	1	2+	3	3+	1	2+
Other acceptable units	4		1		4	
TOTAL	16+		16+		16+	

Applicants without high school credit in modern languages may be accepted if they present 16 acceptable units. A single year of language in high school will not be counted as a unit to satisfy the requirements for admission.

Mathematics includes elementary, intermediate, and advanced algebra; plane and solid geometry; trigonometry, analysis, and any other college preparatory course. Applicants for science and engineering programs must include trigonometry and must have earned a grade of 85 in each mathematics course. Applicants for the nursing programs should include chemistry and biology in their high school program.

Science includes biology, chemistry, physics and other college preparatory courses. Pre-engineering applicants are urged to include physics in their high school preparation.

ADVANCED PLACEMENT

Applicants who have taken college-level courses in high school may be placed in advanced courses and may be given credits as well. Students who have been accepted for admission and desire to apply for such placement must take the Advanced Placement Examination offered in May by the College Entrance Examination Board, Princeton, New Jersey 08540. Students can have their results sent automatically to the University by providing the school code (2929). In most cases, a minimum scored of "3" (non science) or "4" (math/science) may earn advanced placement with 3-6 credits. Biology, Biophysics, and Physical Therapy majors cannot receive biology credits. Students pursuing a pre-med program should be aware that many medical schools do not accept AP credit for required pre-medical courses.

COLLEGE-LEVEL EXAMINATION PROGRAM

Through the CLEP tests, taken before admission, applicants may gain college credit in most academic subjects for work done outside the classroom in jobs, military service, etc., or in non-accredited institutions. For further information contact: College Level Examination Program, Box 1824, Princeton, New Jersey 08540. Students wishing to be considered for CLEP credits should take the CLEP examinations and have the results forwarded to the Director of Admissions.

ACADEMIC DEVELOPMENT PROGRAM

Applicants who fail to meet all of the admission requirements may be considered for a special freshman-year Academic Development Program concentrating on English, logical thinking, reading skills and study habits, as well as work in the student's major field. Satisfactory completion of the ADP program will insure the student normal sophomore standing.

SUMMER BRIDGE PROGRAM

The Summer Bridge Program assists students who have demonstrated achievement and a desire to attend college, but who need to improve their verbal skills. The University is committed to helping such students make those improvements. The Summer Bridge Program for incoming freshmen was established in 1964.

Although all students can benefit from the Bridge program, those who are selected are chosen on the basis of a careful examination of high school transcripts, standardized test scores, and extra-curricular activities.

The Bridge program will assist students in making the transition from high school to college and in the future development of reading and writing skills. The summer program and mentoring during the academic year are designed to help students in the Summer Bridge Program achieve their potential and succeed in their degree program.

STUDENTS WITH DISABILITIES

The University of Scranton complies with all applicable laws and regulations with respect to the accommodation of handicaps and disabilities as these terms are defined in law. The University will provide reasonable accommodations so students can fully participate in curricular and extracurricular activities. Students who need assistance should make timely contact with the Office of Diversity and Equal Opportunity (570) 941-6213.

INTERNATIONAL STUDENTS

The University of Scranton has been educating international students since 1946 and remains committed to that tradition. At present, approximately 50 different countries are represented by undergraduate and graduate students.

The Director of International Student Affairs, whose office is adjacent to the Graduate School in the Estate building, advises and counsels students in order to ensure a smooth transition to a new culture and educational system. The director is moderator of the International Student Association and coordinator of the Family Friendship Program. Selected families in the area participate in the Family Friendship Program and welcome individual international students by offering hospitality in many ways. The University has a house on campus that serves as a mosque for the use of Muslim students. It is available for daily prayers as well as the Friday prayer.

INTERNATIONAL BACCALAUREATE POLICY

The University of Scranton grants college credit for classes taken through a recognized International Baccalaureate (IB) program. Students can earn credit for up to three successfully completed higher-level classes in which a score of "4" or higher is achieved on the appropriate IB examination. For more information on IB credit, contact the Admissions Office.

HIGH SCHOOL SCHOLARS

High school students who have completed their sophomore or junior year with a minimum of a B+ grade average may take one University course each term until they graduate from high school. Courses may be taken for credit or for audit at a special tuition rate of $100 per credit.

Students may enroll for a maximum of three credits per session. Individual exceptions may be made if GPA/SAT scores substantiate the request. Registrations will be processed on a space-available basis. Students will be responsible for tuition and applicable fees.

Courses available are typical freshman-level courses that are accepted toward a University of Scranton degree. The current University of Scranton undergraduate catalog includes details regarding curricular requirements for University of Scranton degree programs. These courses generally transfer to other regionally accredited colleges and universities. However, The University of Scranton cannot guarantee transferability.

Five tuition grants are available during the summer to individuals with demonstrated financial need. Grants are limited to one course per individual per year, a $300 value.

A special orientation program will be held for students registered in the High School Scholars Program. Further information is available from the Office of Admissions, at (570) 941-7540, or Fax: (570) 941-5928.

TRANSFER STUDENTS

Students who wish to transfer to The University of Scranton must submit applications and the usual credentials: official high school records, SAT scores and transcript(s) from the college(s) attended. At the discretion of the Admissions Committee, students from other accredited colleges may be admitted provided: 1. The courses to be transferred are equivalent or comparable to courses offered at The University of Scranton; 2. Students are required to follow all requirements prescribed for the degree program at The University of Scranton; 3. No credit will be given for courses with grades less than "C." Transfer credit is reviewed on an individual basis. Students transferring are required to earn a minimum of 30 credits for an associate's degree or 63 credits for a baccalaureate degree at The University of Scranton. Special orientation sessions are held for transfer students. It should be noted that some departments require that at least half of the credits in the student's major be taken here at the University.

VALIDATION OF BUSINESS TRANSFER COURSES

Students may validate courses by successfully completing one or more advanced courses in the subject for which the course in transfer is a foundation course. Approval is granted by the dean of The Kania School of Management. This applies only to lower-division transfer courses which the University offers at the upper-division level.

STUDENT EXPENSES

ROOM AND BOARD — POLICIES AND GUIDELINES

Residence Life. The University of Scranton Residence Life system is comprised of 13 freshman and 19 upper-class residences. Resident freshmen are normally assigned to freshman residence halls that offer support for their academic programs, personal development and leadership opportunities under the guidance of Residence Life staff, Jesuit counselors and faculty. Upper-class students may select from a range of housing options that includes attractive houses, apartment buildings, suite-style halls with semi-private baths, and traditional halls offering single and double rooms. Also, there is limited apartment-style housing available for graduate students.

The University of Scranton requires all first- and second-year undergraduate students to live in campus housing. Exceptions to this policy are limited to students who reside with a parent, legal guardian or spouse; are 21 years of age or older; or present other documented extenuating circumstances. The admissions office will determine a student's residency status upon admission to the University.

The University provides in-room access to the University's communication network (television, computer, and video, including instructional and commercial television) in all residence-hall rooms and telephone service to rooms in University houses at no additional charge. This service includes unlimited local calling and voice mail for each room, as well as discounted long-distance rates for those enrolled in the University's long-distance program. In addition, light in-room housekeeping, 24-hour maintenance and 24-hour security are provided.

Students residing in off-campus housing (within a one-mile aerial radius of campus) can also have access to the University's communication services, including basic telephone service, voice mail/messaging service and long-distance service.

For more information regarding these communication services, contact the Office of Network Resources, St. Thomas Hall, Room 102, or call 941-6181.

Housing costs are based on the building to which each student is assigned. There are four housing plans: **Plan AA** applies to townhouses on Mulberry Street and Madison Avenue; **Plan A** applies to Gavigan College and Redington Hall and Mulberry Townhouses Double Rooms; **Plan B** applies to Cambria House, Casey Hall, Driscoll Hall, Gannon Hall, Lavis Hall, Leahy Hall, Luzerne House, McCormick Hall, McKenna House, Nevils Hall, Southwell House, Tioga House, McGowan House and all of the University theme houses; **Plan C** applies to Denis-Edward Hall, Fitch Hall, Hafey Hall, Hannan Hall, Jerrett Apartments, Lynett Hall, Martin Hall, McCourt Hall and Montgomery Apartments. **Please note that room and board charges are per semester. Even though the fee does cover intersession housing, an additional fee is assessed for any meal plan. No fees include vacation periods.**

Dining Services. Students have a choice of three cost-effective meal plans providing 19, 14 or 10 meals per week. The 19-meal plan provides three meals per day Monday through Friday, with brunch and dinner on Saturday and Sunday. The 14-meal plan provides any combination of 14 meals per week. The 10-meal plan offers students any combination of 10 meals per week. Meals are not served during vacation periods. All freshmen living in University housing must participate in the 19-meal plan during the entire freshman year. Upper-class residents living in Driscoll, Leahy, Redington and Gavigan Halls must participate in one of the three University meal plans. Meal-plan participation is optional for upper-class residents of Linden Plaza and the University houses and for commuters and students living in private housing. Discounted meal tickets are available for guests and students wishing additional flexibility.

Contractual Obligations. Once enrolled in a room and/or board plan, the student is obligated to that plan for the remainder of the academic year including intersession.

Intersession. Resident students taking one or more classes during intersession must live in University housing and, if applicable, continue their meal-plan program if they were enrolled for room and/or board for the preceding fall semester. As noted above, additional fees do apply for meals. For reasons of safety and security, those not enrolled in classes during intersession are not permitted to reside in University housing. Student athletes approved to stay by the Office of Residence Life may, however, live in their rooms over intersession without taking classes.

STUDENT IDENTIFICATION CARDS

Every student attending The University of Scranton must have a current Royal Card (photo ID). This card must be presented upon demand for student services, registration, and use of athletic facilities and the library.

The Royal Card is used for meals in the dining facilities, resident-hall access, photocopying in the library, and may be used as a substitute for cash at many locations on campus. A brochure describing the Royal Card account may be obtained at the Royal Card Office, St. Thomas Hall, Room 103 or by calling 941-7400. Student photos are taken Monday through Friday from 8:30 a.m.-4:30 p.m., or Saturday and Sunday from 9:00 a.m. to 4:00 p.m., at the Royal Card Office.

TUITION PAYMENTS

Each semester an invoice displaying your courses, your room assignments, and your semester charges will be mailed to your mailing address. The tuition and fees are payable by the due date listed on the invoice. **A Remittance Form is attached to the bottom of the invoice. This Remittance Form must be returned with payment by the due date. Students paying their bills via AMS or with financial aid must also return the Remittance Form indicating their source of funding.**

Without exception, lab fees must be paid for all courses with a lab requirement. Also, the University Fee must be paid by all College of Arts and Sciences, Panuska College of Professional Studies and Kania School of Management students registered for courses.

No student shall be permitted to receive any degree, certificate or transcript of record until the student's financial account with the University has been settled. For students who graduate or withdraw from the University, any financial account not settled with the University Bursar's Office will be forwarded to an external collection agency. At the time an account is placed with an agency, collection costs become the responsibility of the student, and they will be added to the balance due to the University.

FAMILY TUITION REDUCTION

Whenever two or more dependent children from the same family are in attendance during the same semester at the University as full-time undergraduate students, the family tuition-reduction policy will apply. Also, whenever at least one dependent child in a family is in attendance at the University as a full-time undergraduate student and a parent is enrolled full-time as an undergraduate student, the tuition-reduction policy will apply. Students must be full-time undergraduate students enrolled in the University. The tuition deduction is equivalent to each student's semester tuition multiplied by 10%. The amount of tuition credit that will be awarded each semester for each student will be calculated after other financial aid has been applied by Bursar's Office. Forms and additional information may be obtained from the Bursar's Office. A completed form must be filed in the Bursar's Office each year to receive the reduction for that year.

MONTHLY PAYMENTS

The University accepts monthly payment through participation with a professional agency, Tuition Management Services. For application information, please call 1-800-722-4867 or contact them on the Web at www.afford.com. Brochures inviting family participation in a ten-month payment plan are mailed to parents of all incoming students by May of each year. Also, an enrollment form inviting family participation in a four-month semester plan will be included with the fall billing in July and the spring billing in December.

VISA, MasterCard and Discover will be accepted for tuition and fee payments. Please contact the Bursar's office located in 201 St. Thomas Hall, or telephone (570) 941-4062 for details.

TUITION INSURANCE

The University, through A.W.G. Dewar, Inc., provides the Tuition Refund Plan (TRP). The plan helps protect your educational investment. When combined with the University's published refund policy, reimbursement totaling 100% of tuition and room and board charges billed by the University will be made if you must withdraw from a term because of

a personal illness or accident. In case of withdrawal due to a mental/nervous disorder, 60% of the above charges are covered. Application information is available from the bursar's office or you may call A.W.G. Dewar, Inc. at (617) 774-1555.

TUITION AND FEES ACADEMIC YEAR 2002-2003

TUITION: flat tuition per semester (applied for the fall and spring terms to freshmen, sophomore, junior and transfer students with an admit term of fall 96 and thereafter):

*Physical Therapy Majors (12 to 18 credits) $11,276
All other Majors (12 to 18 credits) $10,124

Per credit rate applied for course loads less than the 12-credit flat-tuition minimum credit load, or to credits in excess of the 18-credit flat-tuition maximum credit load $564

TUITION: per credit (applied for the fall and spring terms to students with an admit term prior to fall 96) $564
(Intersession-all students) $564
(Summer Session-all students) $472

* Note: The tuition charge for required intersession and summer courses taken by Physical Therapy majors is included in the fall and spring flat-tuition assessment.

Tuition for Special Programs—During their junior and senior years (fall and spring semesters), students in the Honors Program, the Special Jesuit Liberal Arts program, and the Business Leadership Program will be allowed to take up to 21 credits per semester at no additional charge above the flat-tuition rate.

ORDINARY FEES

University Fee per semester (fall and spring):
(for freshmen, sophomore, junior and transfer students with an admit term of fall '96 and thereafter) $100
(for students with an admit term prior to fall '96) $515

Health Fee per semester (fall and spring for students with an admit term prior to fall '96) $65

Continuation Fee (in lieu of University Fee for students not in residence) per semester... $5

Medical Leave Fee per semester $15

Reader (Individual Study) Fee, per credit, in addition to regular tuition $30

Breakage Fee ..... Actual

FOR GRADUATING STUDENTS ONLY
Commencement/Yearbook Fee ..... $190/$40

FRESHMEN/TRANSFERS
Orientation $200

LABORATORY FEES

Science Departments
Biology, per course, per semester $100
Chemistry, per lab hour per semester $40
Physics, per course, per semester $75
Psychology, per course, per semester $50
Medical Tech Intern, per semester $125

English Department
Film Screen Fee, per course, per semester $40
Writing Fee, per course, per semester (excluding WRTG 105, 106, 107) $25

Communication Department

Radio Lab Fee, per course, per semester $50
TV Lab Fee, per course, per semester $50

History/Political Science Departments

Film Screen Fee, History 212 & 218, per course, per semester $30
European Union Simulation Fee, PS 331, per course, per semester. $100

Foreign Language Department

Language Lab Fee, per course, per semester $50

Nursing Department

Clinical Lab, per hour, per semester, undergraduate $40
Clinical Lab, per clinical course, RN, NURS 481 and 490 ..... $110
Assessment Fee, Juniors, per lab hours, per semester $40
Assessment Fee, Seniors, per lab hours, per semester $50
NLN Mobility Examinations (RN students only; 3 exams) $195

Physical Therapy Department

Clinical Lab, per hour, per semester $40

Occupational Therapy Department

Clinical Lab, per hour, per semester $40

Music Department

Music Fee (Music 111, 112, 219) $30

Art Department

All Art Courses Lab Fee, per course, per semester $70
All Art History Courses (except ARTH 140), per course, per semester $30
Art/Music (ARMU 140) $30
Art/Music (ARMU 141) $45

SPECIAL SERVICE FEES

Late Tuition Payment Fee $100
Returned Check Fee $25
Late Registration Free $20
Requested Change of Schedule after Classes Begin $15
Change of Major Fee $15
Off-Campus Course Permission Fee $25
Certified Transcript (per copy)
Currently Matriculated Students $3
All Other Requests $5

ROOM AND BOARD FEE SCHEDULE:

Room Rent AA (per semester)—Mulberry Plaza (Single Rooms) $2,974
Room Rent A (per semester) — Redington and Gavigan Halls, Linden Plaza and Mulberry Plaza (Double Rooms) $2,702
Room Rent B (per semester) — Theme Houses, Driscoll, Gannon, Lavis, McCormick, Leahy, Luzerne, Nevils, Tioga, McGowan, Casey, Cambria $2,554
Room Rent C (per semester) — Denis Edward, Fitch, Hafey, Hannan, Lynett, Martin, McCourt, Jerrett, Montgomery $2,409
Room Damage Deposit $200
Food Plan, 19-meal plan (intersession — $494.) semester $1,831
Food Plan, 14-meal plan (intersession — $456.) semester $1,685
Food Plan, 10-meal plan (intersession — $396.) semester $1,437
Summer Room Charges (1st and 2nd sessions) $435

"G" session $598
Summer bridge $759
University Housing Activity Fee (annual fee, all returning students) $40

REFUNDS

If a student is authorized to withdraw with honorable standing from the University for a good cause, a written request may be made for reduced charges for tuition, board and room fees. (Note should be taken that the student may not demand a refund as a matter of right.) Ordinarily, laboratory and special service fees are not refundable.* Students who entered the University prior to fall 1996 and who withdraw from individual courses are also eligible to receive credit on their account with the University according to the schedule given below.

SCHEDULE OF REFUNDS

FALL/SPRING SEMESTER	CREDIT
Before the first day of classes and	
To and including 10 calendar days	100%
To and including 17 calendar days	75 %
To and including 24 calendar days	50%
To and including 31 calendar days	25 %
Beyond 31 calendar days of the semester	no refund
INTERSESSION/SUMMER SESSIONS	CREDIT
Before the first day of classes and	
To and including 2 calendar days	100%
To and including 4 calendar days	50%
Beyond 4 calendar days of the session	no refund

* Note: Students billed flat tuition (those entering the University in fall 1996 or later) will also be eligible for a refund if their total course load after the dropped course(s) falls below the flat-tuition minimum credit load, or their course load prior to dropping the course(s) was greater than the flat-tuition maximum credit load of 18 credits. The formula used to calculate refunds for students billed under flat tuition will be available from the Bursar's office.

FINANCIAL AID REFUND POLICY

In accordance with federal regulations, those students who receive federal financial aid and who completely withdraw from the University during the first 60% of a semester will have their federal financial aid (Pell Grants, Supplemental Educational Opportunity Grants, Perkins Loans, Stafford Loans and PLUS Loans) adjusted based on the percent of the semester completed prior to the withdrawal. That is, students will be entitled to retain the same percent of the federal financial aid received as the percent of the semester completed. The date of withdrawal will be the date the student begins the withdrawal process in accordance with the official procedures outlined in the catalog. There will be no adjustment to federal financial aid after 60% of the semester is completed. **Students that must totally withdraw from school should consult with the Financial Aid Office on how the refund policy applies to their situation.**

HEALTH INSURANCE

The University offers undergraduate students the opportunity to enroll in an attractive health-insurance plan at the outset of each academic year. All students residing in University housing units must participate in the University's sponsored health program, unless written evidence is presented showing coverage under another health program (e.g. parent's health policy).

SCHOLARSHIPS AND FINANCIAL AID

The University will help as many qualified students as possible to complete a college education. For this purpose the University maintains an Office of Financial Aid and all inquiries concerning such assistance should be made to the Director of Financial Aid, located in 401 St. Thomas Hall; Telephone (570) 941-7700; Fax (570) 941-4370. Assistance is also available on the web at http://www.scranton.edu or by e-mail: finaid@uofs.edu

PROCEDURES FOR APPLYING FOR SCHOLARSHIPS AND FINANCIAL AID

Complete the Free Application for Federal Student Aid (FAFSA). Priority filing date for incoming students is February 15th; for returning students, April 15th. FAFSA forms are available from high school guidance officers and from the University of Scranton Financial Aid Office.

In order to be eligible for financial aid, students are required to maintain satisfactory academic progress. Standards have been established for federal and University financial aid that measure a student's progress toward a declared educational objective. These guidelines include a maximum time frame for completing a degree, a minimum percentage of credits completed each academic year and a minimum cumulative Grade Point Average. A brief explanation is provided below.

CREDIT REQUIREMENTS

Full-time students are expected to complete their undergraduate degrees within six academic years. Part-time students are allotted a period of time that shall not exceed 12 academic years. Students enrolled in The College of Arts and Science, The Kania School of Management and The J.A. Panuska, S.J., College of Professional Studies who are full-time students must successfully complete a minimum of 24 credits per academic year. Students enrolled in Dexter Hanley College as full-time students must complete a minimum of 21 credits, three-quarter-time students a minimum of 15 credits, half-time students a minimum of 9 credits and less-than-half-time students a minimum of 6 credits per academic year. Full-time dependent students who drop below 12 credits per semester may lose coverage under their parents' health-insurance plan and may be required to begin repayment of student loans.

ACADEMIC REQUIREMENTS

All students must maintain a cumulative grade-point average of 2.00 in order to demonstrate satisfactory academic standing. Academic scholarship recipients are required to maintain a cumulative grade-point average of 2.50, 3.00 or 3.25 depending on the scholarship.

Students should consult the Comprehensive Guide to Financial Aid for a full definition of Satisfactory Progress Standards and the appeals process. Copies are available at the financial aid office.

The following financial-aid programs are available:

LOANS

FEDERAL PERKINS LOAN PROGRAM. The University administers this Federal program which provides 5% interest loans to needy students. A Free Application For Federal Student Aid (FAFSA) is required of all loan applicants.

FEDERAL STAFFORD LOAN PROGRAM is available in cooperation with community banks, credit unions, and savings and loan associations. The University of Scranton's preferred lender is PNC Bank. Freshmen may borrow a maximum of $2,625, sophomores - $3,500, and juniors and seniors - $5,500 per academic grade level. The aggregate maximum for undergraduate study is $23,000. Depending on their grade level, independent students may borrow $4000-$5000 in unsubsidized Stafford loans. The financial aid office will pre-certify a loan up to the maximum grade level amount.

FEDERAL PLUS PARENT LOAN is available for parents of dependent students. Creditworthy parents are able to borrow up to the difference between a student's cost of attendance and total other financial aid. Additional details and applications are available from community lending institutions.

THE PENNSYLVANIA HIGHER EDUCATION ASSISTANCE AGENCY has been designated by the General Assembly to administer the State Grant Program. Students may be awarded from $200 to $3,300 per year. A FAFSA must be filed by May 1.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT is a federal campus-based program administered by the University. Amounts may range from $200-$2,500 per year to students who demonstrate exceptional need. Priority is given to Pell recipients. A FAFSA is required for this program.

THE FEDERAL PELL GRANT provides federal grants, ranging from $400 to $3,750 per academic year, based on financial need. A FAFSA is required.

UNIVERSITY OF SCRANTON AWARDS

The University offers a number of awards based on academic merit and financial need. All accepted freshmen are automatically evaluated academically for scholarship aid. In order to be considered for need-based aid, students must file a FAFSA and either the University Application for Financial Aid or the CSS Profile.

OTHER PROGRAMS:

THE FEDERAL WORK-STUDY PROGRAM is a federal campus-based program that provides employment during the academic year and in the summer for students demonstrating financial need. The majority of the jobs are on-campus positions in various departments and administrative offices. Some jobs, both on and off campus, involve community service. Students seeking campus employment must file a FAFSA and Work-Study Application.

VETERANS BENEFITS — Veterans and eligible dependents should consult their local Veterans Administration counselor in order to establish their eligibility for participation. The Office of the Registrar certifies enrollment for eligible veterans with the Veterans Administration (VA form 22-1999).

U.S. ARMY ROTC SCHOLARSHIPS are available. For more information, please contact the Military Science department in Rock Hall (ph. 941-7457 or 941-6336).

The UNITED STATES AIR FORCE RESERVE OFFICER TRAINING CORPS offers many two- to five-year full- and partial-tuition scholarships for which qualified students may compete

if they enroll in U.S. Air Force ROTC. Certain qualified students may also be eligible for a tax-free stipend of $150 a month. All graduating students who successfully complete the AFROTC program receive commissions as second lieutenants and will serve on active duty in the United States Air Force. For more information, contact the Aerospace Studies Department at 1-800-945-5378, ext. 4860.

THE OFFICE OF VOCATIONAL REHABILITATION under the Pennsylvania Department of Labor and Industry provides help to qualified students. Residents of other states should inquire about similar programs available in their states of residency.

SCHOLARSHIPS

Each year the University offers merit scholarships which are based on a student's high school record of academic achievement. These scholarships include both President's (full tuition) and Dean's (partial tuition) scholarships. Scholarship application procedures are outlined in the University Viewbook.

SCRANTON PREPARATORY SCHOOL SCHOLARSHIP

This four-year, full-tuition scholarship, initiated in 1947 by the president and board of trustees of the University, is given to a graduate of the Scranton Preparatory School in honor of the following (the name of the scholarship rotates from year to year):

THE MOST REV. MARTIN J. O'CONNOR, D.D. SCHOLARSHIP (1999-2003)
— to Mary Ross Sammon
THE MOST REV. RAYMOND A. LANE, D.D. SCHOLARSHIP (2000-2004)
— to Meredith McWilliams
THE JOHN CARDINAL O'CONNOR SCHOLARSHIP (2001-2005)
— to Stephanie Yazinski

Selection of the recipient is on the basis of academic achievement, qualities of leadership, service to the Preparatory School, and recommendation of the president and the dean of studies of the Preparatory School.

PRESIDENTIAL SCHOLARSHIPS

The awarding of Presidential Scholarships provides a unique opportunity to recognize individuals who have served this institution as trustees, faculty, staff or friends.

1998-2002 Presidential Scholarship Recipients

THE MR. AND MRS JOSEPH CAPUTO SCHOLARSHIP— to Jennifer M. Sprance of Whitestone, New York (St. Agnes Academic School).

THE REV. CHARLES CURRIE, S.J., SCHOLARSHIP— to Raymond A. Schafer of Upper Darby, Pennsylvania (Devon Preparatory School).

THE MELINDA C. GHILARDI, ESQ., SCHOLARSHIP— to William S. Slovinsky of Jermyn, Pennsylvania (Lakeland High School).

THE MR. AND MRS. ALAN GRAF SCHOLARSHIP— to Mark P. Fitzgerald of Dickson City, Pennsylvania (Scranton Preparatory School).

THE MRS. HELEN ROBINSON SCHOLARSHIP— to Sharon M. Canale of Ridgefield, New Jersey (Academy of the Holy Angels).

THE MR. AND MRS. STANLEY STETTZ SCHOLARSHIP— to Heather E. Theis of Warrington, Pennsylvania (Gwynedd Mercy Academy).

THE GERALD P. TRACY, M.D., SCHOLARSHIP — to April L. Puscavage of Avoca, Pennsylvania (Scranton Preparatory School).

1999-2003 Presidential Scholarship Recipients

THE BOARD OF TRUSTEES SCHOLARSHIP — to Brooke Burden of Wilkes-Barre Township, Pennsylvania (GAR Memorial High School).

THE MRS. ETHEL D. BRENNAN SCHOLARSHIP — to Jennifer E. Kraljic of Hicksville, New York (Holy Trinity High School).

THE MR. JOHN S. CHIODO SCHOLARSHIP — to Joann C. Zielinski of Sugarloaf, Pennsylvania (Bishop Hafey High School).

THE MR. VINCENT E. CORTESE SCHOLARSHIP — to Ethan M. Giordano of Ringwood, New Jersey (Don Bosco Preparatory School).

THE ROBERT J. DONOVAN, M.D., SCHOLARSHIP — to Stephanie Tessing of Washington Township, Pennsylvania (Washington Township High School).

THE MRS. JOYCE FASULA SCHOLARSHIP — to Ryan M. Surace of Mayfield, Pennsylvania (Lakeland High School).

THE JEROME W. JORDAN, M.D., SCHOLARSHIP — to Melissa M. Stevans of Trucksville, Pennsylvania (Bishop O'Reilly High School).

THE MS. IRENE KOCAK SCHOLARSHIP — to Bridget M. Lee of West Nyack, New York (Albertus Magnus High School).

THE MR. AND MRS. LEONARD R. KUPLINSKI SCHOLARSHIP — to Jonathan T. Yazinski of Moosic, Pennsylvania (Scranton Preparatory School).

THE REV. J.A. PANUSKA, S.J., SCHOLARSHIP - to Jennifer A. Crockett of Northport, New York (St. Anthony's High School).

THE MS. SUSAN M. SWAIN SCHOLARSHIP - to Talia Argondezzi of Norristown, Pennsylvania (Kennedy-Kenrick Catholic High School).

2000-2004 Presidential Scholarship Recipients

THE MSGR. JOHN J. BENDIK SCHOLARSHIP—to Sarita E. Soares of Danbury, Connecticut (Immaculate High School).

THE MRS. VIOLET KELLY SCHOLARSHIP—to Stephen M. Tizzoni of Olyphant, Pennsylvania (Lakeland Junior/Senior High School).

THE MRS. ALICE V. LEAHY SCHOLARSHIP—to Joshua J. Siglin of Cresco, Pennsylvania (Pocono Mountain High School).

THE MRS. KATHLEEN V. MCGURRIN SCHOLARSHIP—to Katherine M. Szczepanski of Elizabethtown, Pennsylvania (Lancaster Catholic High School).

THE SENATOR MICHAEL A. O'PAKE SCHOLARSHIP— to Jessica A. Besak of Glenmoore, Pennsylvania (Villa Maria Academy).

THE DR. AND MRS. RICHARD H. PASSON SCHOLARSHIP— to Joseph Intranuovo of Port Jervis, New York (Port Jervis High School).

THE MR. AND MRS. GERARD ROCHE SCHOLARSHIP — to Christopher R. Adams of Garden City, New York (Chaminade High School).

THE MRS. NICHOLAS D. SACCONE SCHOLARSHIP — to Megan M. Garvin of Philadelphia, Pennsylvania (Mount St. Joseph's Academy).

THE MRS. ELEANOR VOLPE SCHOLARSHIP — to Ann I. Kushmerick of Throop, Pennsylvania (Bishop O'Hara High School).

THE MR. DAVID J. WILLIAMS SCHOLARSHIP — to Edward W. Głowienka III of Philadelphia, Pennsylvania (Holy Ghost Preparatory High School).

2001-2005 Presidential Scholarship Recipients

THE MR. JAMES BARRETT SCHOLARSHIP – to Matthew T. Horejis of Greencastle (Maria Goretti High School).

THE DR. AND MRS. PAUL BORICK SCHOLARSHIP – to Lauren E. Zefran (Forest City Regional High School).

THE JOHN E. BRENNAN SCHOLARSHIP – to Daniel A. Marvin of Elkins Park (LaSalle College High School)

THE MR. CHRISTOPHER M. CONDRON SCHOLARSHIP – to Marie E. Sullivan of Beach Lake (Honesdale High School).

THE DOMINICK CRUCIANI, JR., M.D., SCHOLARSHIP – to Lori A. Bentler of Moscow (North Pocono High School).

THE SR. MARGARET FLEMING, S.S.J., SCHOLARSHIP – to Emile A. Brancato of Dingmans Ferry (home school).

THE MR. JOHN J. GERON SCHOLARSHIP – to Maura L. Adams of Elysburg (Northumberland Christian School).

THE RALPH LOMMA SCHOLARSHIP – to Stephanie A. Klassner of Scranton (Bishop Hannan High School).

THE MRS. JUNE QUINN SCHOLARSHIP – to Karen A. Hoerst of Philadelphia (St. Hubert's Catholic School).

THE HAROLD T. ROSE SCHOLARSHIP – to Carolyn S. Smart of Hatboro (Archbishop Wood High School).

THE MR. AND MRS. EDWARD C. SCARP SCHOLARSHIP – to Sandra D. VanBlarcom of Milanville (Honesdale High School).

THE MR. AND MRS. ROBERT J. SYLVESTER SCHOLARSHIP – to Jennifer J. Rugletic of Taylor (Riverside High School).

THE EDWARD J. ZALESKI, M.D., SCHOLARSHIP – to Sara Beth Visintainer of Denton, Maryland (North Caroline Senior High School).

PURPLE CLUB SCHOLARSHIPS

Noteworthy among gifts to University of Scranton students are the significant amounts contributed annually by the Purple Club of Scranton. Since its founding in 1933, the Purple Club has provided special financial support to deserving and qualified students.

ENDOWMENT

The University Endowment welcomes gifts of funds or property from alumni, parents of students and other persons interested in the support of higher education.

Generally, the principal of an "endowment" is non-expendable. Income earned by investment of the endowment may be used for scholarships, academic chairs, maintenance of buildings or other purposes specified by donors.

Some endowments are established by bequest through wills. Charitable trusts and insurance programs, in more than a dozen variations, also provide a significant source of endowment funds, with the added feature of a life income for the donor. Outright gifts of highly appreciated securities or other property constitute another source of endowment funds.

Those interested in learning more about the cost and tax advantages of establishing a scholarship or other memorial should contact:

The University of Scranton
Office of Institutional Advancement
Scranton, PA 18510-4615
(570) 941-7661

ENDOWED SCHOLARSHIPS

THE EUGENE J. AND ELIZABETH J. AGNONE SCHOLARSHIP—This scholarship, established in 1997, aids needy students from the Scranton area who are interested in pursuing careers in medicine.

THE ALPERIN FAMILY SCHOLARSHIP—Members of the Alperin Family (Irwin E. Alperin, Myer Alperin, Toni Alperin Goldberg, the late Joel M. Alperin and their families) established this scholarship in 1987. It is given to incoming students who have demonstrated excellence in the classroom and financial need. First preference is given to employees of the Alperin family companies and their families, but all worthy students from Lackawanna County and Northeastern Pennsylvania are considered.

THE JOSEPH JAMES AND MARY AGNES ANDRAKO SCHOLARSHIPS—These scholarships were established in 1988 according to the provisions in the will of the late Joseph J. Andrako. The scholarships benefit students who have financial need and who are enrolled in a premedical or allied health sciences program.

THE FRANK A. AND HELEN S. BACIEWICZ SCHOLARSHIP—This scholarship was created in memory of Frank Baciewicz by his family and widow. The student must embody characteristics of generosity, thoughtfulness, humor, and mental and physical tenacity. First consideration is given to students from the Dickson City or Scranton area.

THE MICHAEL B. BAGDZINSKI MEMORIAL SCHOLARSHIP—This scholarship was established by family, classmates and friends of Michael, a member of the Class of 1999 who passed away during his senior year. The scholarship is given to theatre students at the University.

THE EDWARD F. BARTLEY SCHOLARSHIP—Joseph Austin, '52, and his wife, Mary, established this scholarship in 1996 to honor Bartley, a UofS professor emeritus. The scholarship is awarded to students from Lackawanna County, with preference given to students from the Mid-Valley area.

THE REV. JOHN J. BEGLEY, S.J., SCHOLARSHIP—This scholarship, established by the Scranton Jesuit Community to honor one of its own, provides financial assistance based on academic excellence and demonstrated need.

THE REV. PAUL R. BEINING, S.J., SCHOLARSHIP—This scholarship, established by the Scranton Jesuit Community to honor one of its own, is for a student born and raised in Northeastern Pennsylvania and who has demonstrated financial need. First consideration is given to a biology major who maintains an overall B average.

THE VELIO E. BERARDIS, M.D., MEMORIAL SCHOLARSHIP—In 1989 Mrs. Dorothy Berardis established a scholarship to honor the memory of her husband, Velio E. Berardis, M.D. This scholarship provides awards, based on merit and need, to senior premedical students. Special preference is given to those who plan to attend Jefferson Medical College.

THE MICHAEL J. BEVILACQUA SCHOLARSHIP—The Bevilacqua family established this scholarship in 1989 as a memorial to honor the late Michael J. Bevilacqua. The scholarship is available to students from New Jersey families who have more than one student in college at the same time.

THE CHESTER AND VERONICA BOCHINSKI MEMORIAL SCHOLARSHIP—This scholarship was established by James C. Bochinski, '70, and his sister, Marie A. Ryan, in memory of their parents. The scholarship is given to students from Northeastern Pennsylvania who pursue courses of study in psychology, nursing or business administration.

THE FRANCIS P. BOLAND, M.D., MEMORIAL SCHOLARSHIP—Family, friends and colleagues established this scholarship shortly after Dr. Boland's death in 1987. Each year a grant is given to premedical students. The scholarship is based primarily on merit.

THE PAUL M. AND JOAN A. BORICK SCHOLARSHIP—Dr. Borick, '47, and his wife established this scholarship for students from Lackawanna and Wayne counties who intend to pursue courses of study in microbiology.

THE MARGARET BRIGGS FOUNDATION SCHOLARSHIP—In 1995 the Margaret Briggs Foundation established this scholarship for an incoming freshman who demonstrates financial need. Students from Lackawanna County are given first consideration; thereafter qualified students from one of the surrounding counties are considered.

THE WILLIAM J. AND ELIZABETH F. BURKAVAGE SCHOLARSHIP— Established in 1998, this scholarship is awarded to deserving students in Northeastern Pennsylvania, with first preference to those who live in Lackawanna County.

THE BURKE FAMILY SCHOLARSHIP—Income from this scholarship benefits needy and deserving students. The Burke family was originally from the Hyde Park section of Scranton. Thomas F. Burke, '09, played a leadership role in establishing the scholarship.

THE ALIO J. BUSELLI MEMORIAL SCHOLARSHIP—Mrs. June Buselli established this scholarship in memory of her husband to assist incoming freshmen from Lackawanna County pursuing degrees in chemistry.

THE REV. HENRY J. BUTLER, S.J., MEMORIAL SCHOLARSHIPS—The first scholarship, for students from Bishop Hannan High School in Scranton, was established in 1984 by James Summers in honor of the executive vice president of the University who died in office in 1981. A second Butler Scholarship, for students from Scranton High School, was established in 1985 by John A. McCrane, a classmate of Father Butler at Georgetown University.

THE PRIVATE FRANK J. CALI SCHOLARSHIP—Mr. and Mrs. Samuel C. Cali created this scholarship in memory of Mr. Cali's brother. It is available to any student who meets the University's qualifications.

THE BRIDGET CARNEY SCHOLARSHIP—This scholarship was established in 1972 by a bequest of James I. Kearney, M.D. Income from the scholarship, which is named to honor the memory of Dr. Kearney's mother, is awarded to students, one or both of whose parents were or are parishioners of St. Ignatius Parish, Kingston, Pennsylvania.

THE CLASS OF 1952 50TH REUNION SCHOLARSHIP—In recognition of its Golden Anniversary Reunion, the Class of 1952 established this scholarship, which is based on financial need and academic merit.

THE JAMES J. CLAUSS SCHOLARSHIP—Established in 1973 by a local businessman and alumnus, '47, this scholarship provides aid to students who require financial assistance but do not qualify for most aid programs based on financial need. First consideration is given to Northeastern Pennsylvania students.

THE JON A. CLAUSS SCHOLARSHIP—An endowed scholarship was established in 1980 to honor the memory of Jon A. Clauss, son of Dr. and Mrs. Thomas F. Clauss of Justus, Pennsylvania. Income from the scholarship is distributed to deserving young men and women.

THE CONDRON AMBITION AND ACHIEVEMENT SCHOLARSHIP—Established in 2000 by Christopher M. Condron, '70, this scholarship benefits incoming freshmen who demonstrate exemplary ambition and self-achievement, particularly in non-academic areas. First preference is given to students from Lackawanna County, followed by those from Luzerne County and other counties in Northeastern Pennsylvania.

THE REV. JAMES J. CONLIN, S.J., SCHOLARSHIP—This scholarship provides financial assistance based on academic excellence as well as demonstrated need.

THE JAMES A. AND JOAN CONNOLLY SCHOLARSHIP—Mr. Connolly, '43, and his wife established this scholarship which provides financial assistance based on academic excellence and demonstrated need.

THE LOUIS AND ERNESTINE DeSARRO CORTESE MEMORIAL SCHOLARSHIP—Vincent E. Cortese, '37, established this scholarship in 1998 in memory of his parents. Students must be enrolled in The College of Arts and Sciences.

THE COTTONE SCHOLARSHIP—A bequest from Benjamin J. Cottone, M.D., '27, established this scholarship for premedical students.

THE GRACE COURTNEY SCHOLARSHIP—Raymond S. Courtney established this scholarship with a bequest in memory of his wife. It provides financial assistance to students who meet the University's admission requirements.

THE CRUCIANI FAMILY SCHOLARSHIP—Dominick A. Cruciani, Jr., M.D., '54, his wife, Florence, and their family have established this scholarship for students from Mid-Valley and Valley View high schools who intend to pursue courses of study in health-allied fields.

THE WILLIAM J. CUSICK PURPLE CLUB SCHOLARSHIP—Mr. Cusick, '52, established this scholarship, based not on academic merit but on demonstrated financial need.

THE SALVATORE CUSUMANO FAMILY SCHOLARSHIP—This scholarship, established through a bequest from Mr. Cusumano, is awarded to students who are enrolled in the premedical program and who have demonstrated financial need.

THE HAROLD DAVIS, M.D., SCHOLARSHIP—This scholarship, established in 1994, is presented to a female undergraduate from Northeastern Pennsylvania pursuing a degree in the health sciences. The recipient must be involved in extracurricular activities. Both financial need and scholastic merit are considered.

THE REV. ROYDEN B. DAVIS, S.J., SCHOLARSHIP—This scholarship, established by the Scranton Jesuit Community to honor one of its own, provides financial assistance based on academic excellence and demonstrated need.

THE EUGENE J. DONAHUE SCHOLARSHIP—This scholarship was established in 1997 in memory of John and Ann Donahue by Eugene Donahue, a resident of Clarks Summit and a 1968 graduate of The University of Scranton. The scholarship is for students who show a demonstrated need, and first consideration is given to students residing in Lackawanna County. Recipients must be enrolled in the University's Dexter Hanley College.

THE JUDITH A. DOYLE SCHOLARSHIP—This scholarship was created by Joseph T. Doyle, '69, in honor of his wife and in appreciation of his Jesuit education at The University of Scranton. The scholarship provides financial assistance to deserving and needy students.

THE DENISE DUBBELS MEMORIAL SCHOLARSHIP—This scholarship was created by students and faculty members in memory of Denise, an Honors Program student and member of the Special Jesuit Liberal Arts program, who was killed in an automobile accident while studying in Russia. Her degree was conferred posthumously in 1994. The scholarship aids students who want to study in developing countries.

THE ROBERT I. EDELSOHN SCHOLARSHIP—In 1964 a sum was bequeathed in the estate of Robert I. Edelsohn, a Polish immigrant who became a Scranton businessman and realtor. Income provides scholarships for needy and deserving students at the University.

THE EDUCATIONAL FREEDOM SCHOLARSHIP—In 1990 Joseph E. McCaffrey, '38, established this scholarship to aid students who graduate from Lackawanna County parochial schools. Mr. McCaffrey, a member of the New Jersey Chapter of Citizens for Educational Freedom, passed away in 2000.

THE ETR AND ASSOCIATES, INC., SCHOLARSHIP—This scholarship was created by Robert E. Lee, president of ETR and Associates, in appreciation of the fine Jesuit education his daughter received at The University of Scranton. It is open to any student demonstrating personal financial need.

THE PETER J. FARRELL AND MAIDA LIPPERT FARRELL SCHOLARSHIP— Proceeds from this scholarship, established in 1988 by Professor Matthew C. Farrell, Ph.D., are intended for students of Native American ancestry.

THE JOHN FRANCIS FINETTI MEMORIAL SCHOLARSHIP—This scholarship was established by the family of a young man from the Hill Neighborhood near the University's campus. It is for students who demonstrate ability in one or more of the areas of history, music, forensics and theatre, with preference given to students from Lackawanna County.

THE LAUREEN FINN MEMORIAL SCHOLARSHIP—Laureen Finn died in her sophomore year at The University of Scranton. Family, friends and fellow members of the Class of 1990 established this scholarship in her memory. Proceeds assist a freshman education or English major with preference given to residents of Englishtown, New Jersey.

THE MARTHA AND HERBERT FINN MEMORIAL SCHOLARSHIP—This scholarship was established by William H. Finn, '67, in honor of Martha and Herbert Finn. The proceeds are to assist students from southern Connecticut and Westchester, Nassau and Suffolk counties in New York.

THE MARTHA FITCH SCHOLARSHIP—In 1955 a bequest was made to the University by Miss Martha Fitch, a retired nurse and former superintendent of Thompson Hospital, Scranton. Income is used to provide scholarships for needy and deserving students.

THE REV. JOHN J. FITZPATRICK, S.J., SCHOLARSHIP—This scholarship honors the Rev. John J. Fitzpatrick, S.J., who, prior to his death in 1987, served The University of Scranton for 22 years in various roles including dean of men, Jesuit minister, student counselor and University chaplain. The scholarship helps students of academic excellence who have demonstrated financial need. Preference is given to students from Northeastern Pennsylvania who are enrolled in The Dexter Hanley College. The scholarship was established through the generosity of Midori Y. Rynn, Ph.D., professor of Sociology/Criminal Justice.

THE FLEET PENNSYLVANIA SERVICES SCHOLARSHIP—Sons and daughters of Fleet Pennsylvania Services employees are eligible for this scholarship. The University's financial aid office selects students on the basis of financial need.

THE JAMES H. FOY, M.D., MEMORIAL SCHOLARSHIP—Established in 1987 by Dr. and Mrs. Joseph J. Rupp to honor Dr. Foy, whose encouragement and support helped Dr. Rupp in his education, the scholarship is given to premedical students who also demonstrate proficiency in the humanities.

THE JAMES M. FRANEY SCHOLARSHIP—This scholarship, started from a bequest from the estate of Mr. James M. Franey, benefits students from Northeastern Pennsylvania.

THE SARA G. FRIEL MEMORIAL SCHOLARSHIP—Before her death in 1982, Sara G. Friel, aunt of then University president, William J. Byron, S.J., directed that part of her estate be used to assist deserving and financially needy students each year.

THE JOSEPH P. GALLAGHER MEMORIAL SCHOLARSHIP—The Greater Scranton Chamber of Commerce created this scholarship in 1995 to honor the memory of Mr. Gallagher, who was employed by the Chamber for 15 years. The scholarship is given annually to a senior who is the son or daughter of an employee of any current member of the Chamber.

THE MORRIS AND MAE GELB SCHOLARSHIP—Established in 1989, through gifts from the Gelbs and members of their family and friends, this scholarship benefits deserving and needy students of all faiths attending the University.

THE REVEREND JOSEPH GIRARD GILBRIDE, S.J., MEMORIAL SCHOLARSHIP—This scholarship is for residents of Peckville (Blakely Borough), Carbondale, Throop, Nanticoke, and the Parsons Section of Wilkes-Barre and Plymouth, all in Northeastern Pennsylvania. It was established by Fr. Joseph G. Gilbride, prior to his death, to provide assistance to needy and worthy students.

THE DR. AND MRS. JOHN GIUNTA SCHOLARSHIP—Professor Giunta created this scholarship out of his loyalty to The University of Scranton and his appreciation for the fine education his own children received here. The scholarship is given to students pursuing degrees in economics.

THE PETER S. GRAYBAR MEMORIAL SCHOLARSHIP—Created to honor Peter S. Graybar, a beloved friend and active member of The University of Scranton's Class of 1993, this scholarship provides assistance to a junior who has demonstrated active involvement in extracurricular activities.

THE EDWARD T. GRONCKI SCHOLARSHIP—Established to honor the memory of a University of Scranton alumnus, this scholarship is for deserving young men and women who live in Lackawanna County.

THE IRVING AND EDYTHE GROSSMAN SCHOLARSHIP—This scholarship was created out of the generosity of Irving and Edythe Grossman and is a memorial in their honor. Eligible students must demonstrate academic achievement and participation in community service.

THE JUDGE FREDERICK W. GUNSTER SCHOLARSHIP—The estate of Joseph F. Gunster, '17, provided funds for this merit scholarship to honor the memory of Joseph's father.

THE MARGARET GUNSTER SCHOLARSHIP—Joseph F. Gunster's mother is remembered through a scholarship designed to assist students from low-income families.

THE RUTH GUNSTER MEMORIAL SCHOLARSHIP—In 1971, Joseph F. Gunster, '17, established this scholarship in loving memory of his wife. The scholarship, which was increased by a bequest in 1980, benefits students from Northeastern Pennsylvania.

THE JOHN AND LUCILLE GUZEY SCHOLARSHIP—Begun in 1978, this scholarship assists members of the Scranton Boys and Girls Club, and also students with financial need.

THE A.J. GUZZI GENERAL CONTRACTORS, INC., SCHOLARSHIP—Angelo J. Guzzi created this scholarship to assist qualified and deserving students from one of the following high schools: Abington Heights, Valley View, Mid-Valley or Lakeland. The recipient is an incoming freshman who demonstrates financial need.

THE REV. JOSEPH M. HAMERNICK, S.J., SCHOLARSHIP—This scholarship, established by the Scranton Jesuit Community to honor one of its own, provides financial assistance based on academic excellence and demonstrated need.

THE REV. DEXTER HANLEY, S.J., SCHOLARSHIP—This scholarship, named for the late Dexter Hanley, S.J., Esq., former president of The University of Scranton, assists nieces and nephews of University Jesuit personnel.

THE SARKIS R. HAZZOURI, JR., MEMORIAL SCHOLARSHIP—This scholarship was established in 1997 to assist incoming freshmen from Lackawanna County. First preference is given to graduates of West Scranton High School who intend to enroll in The Kania School of Management.

THE REV. WILLIAM B. HILL, S.J., SCHOLARSHIP—This scholarship was established by the late Gerardine C. Hill to honor her brother, Rev. William B. Hill, S.J. Since 1969, Fr. Hill has served in several administrative positions at The University of Scranton, including that of special assistant to the president.

THE HILL NEIGHBORHOOD ASSOCIATION/PETER CHEUNG SCHOLARSHIP—This scholarship, named in honor of Peter Cheung, who died in an accident while an undergraduate, benefits a junior or a senior who has demonstrated service to the neighborhood and the University community. Preference is given to residents of the city of Scranton's Hill Neighborhood.

THE HOESCHELE-STEINMETZ SCHOLARSHIP—This scholarship was established by General Electric in honor of David B. Hoeschele, an alumnus of the Class of 1950. Mr. Hoeschele was chosen by G.E. for a prestigious award for his leadership in the field of electronic circuit design. He requested that funds be used to establish a scholarship for United States citizens or permanent residents from Northeastern Pennsylvania, who are enrolled as full-time undergraduates in either the physics or electrical engineering program. This scholarship is based on need and academic merit.

THE GEORGE RONALD HOLMES, Ph.D., SCHOLARSHIP—Dr. Holmes, an alumnus of the Class of 1961, and his wife started this scholarship to provide aid to junior and senior psychology majors.

THE ROBERT V. HORGER SCHOLARSHIP—This scholarship, established by Robert V. Horger, a prominent Scranton banker, is given to qualified students from the incoming freshman class who demonstrate financial need.

THE FRANK AND JEAN HUBBARD SCHOLARSHIP—This scholarship, established through a generous gift from Frank and Jean Hubbard, is for graduates of North Pocono High School in the top 25 percent of their class who have demonstrated financial need. It is expected that the recipient will take a minimum of 15 credits each semester.

THE ITT SCHOLARSHIP—The International Telephone and Telegraph Corporation established this scholarship to encourage students to pursue academic excellence. The Office of Admissions annually selects an incoming freshman to receive the scholarship, which is renewable on the basis of academic achievement.

THE JESUIT COMMUNITY SCHOLARSHIP—Substantial annual gifts from The University of Scranton Jesuit Community have made possible an endowment to provide unrestricted scholarship aid to deserving students. Most scholarships are based on financial need and academic achievement.

THE JETHRO SCHOLARSHIP—Established by a University of Scranton faculty member, Dr. Everett R. Brown, this scholarship is awarded to a freshman management, marketing or economics/finance major who demonstrates that he or she has earned a significant amount of total college expenses. It is not dependent upon financial status of parents or guardians nor high school grades, and is available for four years, as long as the recipient maintains a grade point average of 3.00 or better.

THE B. CARL JONES MEMORIAL SCHOLARSHIP—This scholarship was established in 1988 by family, friends and colleagues of the late B. Carl Jones, a University trustee and benefactor. The scholarship provides financial assistance, based on need, to students from Lackawanna County who are enrolled in The Kania School of Management.

THE STANLEY KARAM SCHOLARSHIP—Fred C. Karam established this scholarship in 2000 to honor his father. Lackawanna County residents are eligible for the scholarship, with first preference to graduates of West Scranton High School who enroll in The Kania School of Management.

THE FRANCIS J. KEARNEY SCHOLARSHIP—A 1977 gift from a retired pharmacist, followed by a bequest in 1979, made possible this scholarship to assist deserving students in need of financial aid.

THE KOCH-CONLEY AMERICAN LEGION SCHOLARSHIPS—Established in 1985 by agreement with the American Legion, these scholarships are provided on the basis of academic achievement and financial need. First preference is given to children and grandchildren of the members of the Koch-Conley American Legion Post 121. Thereafter, family members of other Pennsylvania American Legion Post members may be considered.

THE REV. STEPHEN A. KOLLAR MEMORIAL SCHOLARSHIP—This scholarship was established in 1977 from the will of the late pastor of Holy Family Church, Scranton. Applications must be considered in the following priority: 1. Kinship to Rev. Stephen Kollar; 2. Members of the Holy Family Church for a minimum of three years prior to filing the application. In the event that there are no eligible candidates in these categories, other needy students may be considered.

THE MARY R. WALSH KRAHE SCHOLARSHIP—Established in 1987 by Mary R. Walsh Krahe in memory of her brothers, Nicholas E. Walsh and William E. Walsh, and the Walsh family of Old Forge, Pennsylvania, this scholarship provides support to students from Lackawanna County with preference given to students who attended Old Forge High School.

THE KUEHNER SCHOLARSHIP—This scholarship was established by Carl, '62, and Joanne Kuehner of Naples, Florida, in 1985. The scholarship provides financial assistance to needy students from single-parent families in Lackawanna County.

THE LACKAWANNA MEDICAL GROUP EDUCATIONAL SCHOLARSHIP—This scholarship provides assistance to students from Lackawanna County who are in financial need and who intend to pursue careers in health-related professions. First preference is given to children of persons affiliated with Lackawanna Medical Group.

THE REV. JOHN W. LANGE, S.J., SCHOLARSHIP—This scholarship, established by the Scranton Jesuit Community to honor one of its own, provides financial assistance based on academic excellence and demonstrated need.

THE JOSEPH F. AND ROBERT G. LAVIS SCHOLARSHIP—In 1990 a gift was made to the University through the estate of Robert G. Lavis, a Scranton businessman. Income from this gift provides a full four-year scholarship to an incoming freshman. This scholarship also helps junior and senior students who have a reduction in their ability to meet educational expenses.

THE EDWARD P. LEAHY SCHOLARSHIP —This scholarship was established in 1989 by Edward R. Leahy, Esq., '68, in honor of his late uncle and provides aid to needy students.

THE LESLIE FAY SCHOLARSHIP—This scholarship was established to assist with the cost of education for family members of Leslie Fay employees at the Wilkes-Barre, Pennsylvania, facility.

THE RALPH J. LOMMA SCHOLARSHIP —This scholarship, created in honor of Mr. Lomma, an alumnus of the Class of 1949 and a distinguished Scranton businessman, is presented to students with outstanding high school records. A full-tuition scholarship is awarded every four years to one student.

THE WILLIAM V. LOUGHRAN AND ALBERT E. PETERS SCHOLARSHIP—Established in 1985 through a gift of Albert E. Peters and Elizabeth Loughran Peters, this scholarship assists seniors who intend to pursue graduate studies in the fields of science and medicine. The scholarship is based on merit and need.

THE BRUCE LOWENBERG AND JOHN McLEAN KELLY MEMORIAL SCHOLARSHIP—Established in 1988 by Mrs. Frances McLean Lowenberg, this scholarship benefits qualified and deserving young men and women.

THE CLARE BOOTHE LUCE SCHOLARSHIP—A grant from the Clare Boothe Luce Fund provides undergraduate scholarships to enrolled female students majoring in mathematics and the physical and computing sciences.

THE FRANK J. AND MAE C. MacENTEE MEMORIAL SCHOLARSHIP—Established by the MacEntee family in memory of their beloved parents, this scholarship assists deserving students with their education costs.

THE REV. FRANK J. MacENTEE, S.J., SCHOLARSHIP—This scholarship, established by the Scranton Jesuit Community to honor one of its own, provides financial assistance based on academic excellence and demonstrated need.

THE BETH ANNE AND BRIAN S. MACKIE MEMORIAL SCHOLARSHIP—This scholarship was created in 1991 as a memorial to Beth Anne Mackie by her parents and renamed in 1998 after the death of Beth Anne's brother, Brian. The eligible student must be a psychology major who demonstrates academic excellence.

THE EDWARD J. AND ALICE MANLEY SCHOLARSHIP—Mr. Manley, '60 and a former chair of the University's board of trustees, and his wife established this scholarship for students who live in Lackawanna County.

THE SALLY AND RICHARD MARQUARDT SCHOLARSHIP—This scholarship was established in 1997 by Mr. and Mrs. Marquardt, residents of Waverly, Pennsylvania. It is given each year to qualified local students.

THE JOHN P. MARTIN, Ed.D., SCHOLARSHIP—Established in 2002, this scholarship is for undergraduate students preparing for the priesthood.

THE REV. THOMAS D. MASTERSON, S.J., SCHOLARSHIP—This scholarship was established by the Scranton Jesuit Community and friends of Fr. Masterson in honor of the 50th anniversary of his ordination into the priesthood. The need-based scholarship is for graduates of Loyola Blakefield High School in Towson, Maryland.

THE MARTIN L. MATTEI MEMORIAL SCHOLARSHIP—Mr. Mattei, '42 and the first superintendent of schools in the Pittston Area School District, passed away in 1999. His family established this scholarship for Pittston Area High School graduates who demonstrate high academic achievement and financial need.

THE FLORENCE ZYGMUNT McANDREWS AND EMMA KACER SCHOLARSHIP—This scholarship was established anonymously in 2001 in honor of two nurses who touched the lives of those in their care with compassion. The scholarship is for nursing students from Northeastern Pennsylvania, with first consideration to residents of Lackawanna County, and is based on financial need and a demonstrated commitment to serving others.

THE CONGRESSMAN AND MRS. JOSEPH McDADE PROGRAM OF PUBLIC SERVICE—This scholarship, established in 1990, supports students majoring in political science who are doing internships in Scranton-area government offices with the intention of pursuing careers in public service.

THE JOSEPH M. McDADE SCHOLARSHIP—Contributions from two special tributes in 1998 to retiring U.S. Congressman McDade were used to establish this scholarship to provide need-based financial aid for students from Northeastern Pennsylvania.

THE ROBERT L. McDEVITT, K.S.G., SCHOLARSHIP—This scholarship, established in 1977, provides assistance to qualified and deserving Dexter Hanley College students. The scholarship was established by Robert L. McDevitt, K.S.G., a Georgetown University classmate and long-time friend of the late Rev. Dexter L. Hanley, S.J., who served as president of the University from 1970 to 1975.

THE PATRICK J. McGEEHAN MEMORIAL SCHOLARSHIP—Mrs. Betty Ann McGeehan established this scholarship in 2000 to celebrate the 50th anniversary of her husband's graduation from the University. The scholarship is for residents of Luzerne County.

THE MONSIGNOR ANDREW J. McGOWAN SCHOLARSHIP—The F.M. Kirby Foundation, Inc., established this scholarship to honor Msgr. McGowan, a University of Scranton trustee emeritus and honorary degree recipient. It is used to assist deserving students who reside in either Lackawanna County or Luzerne County.

THE REV. BERNARD R. McILHENNY, S.J., SCHOLARSHIP—Joseph A. Quinn, Jr., of the Class of 1963, established this need-based scholarship to honor Admissions Dean Emeritus, Fr. McIlhenny, and also to honor his parents, Mary and Joseph A. Quinn, Sr. First consideration is given to residents of Luzerne County followed by residents of Lackawanna County.

THE JOHN J. AND KATHLEEN McLAINE MEMORIAL SCHOLARSHIP—John J. McLaine, '71, established this scholarship in 1997 to honor his parents. Preference is given to students from Lackawanna County who are enrolled in The Kania School of Management.

THE JOHN P. McLEAN SCHOLARSHIP—The scholarship was established in 1985 by former trustee Thomas E. Sheridan, '60, and many other alumni, students, family and friends to honor Professor John P. McLean, a faculty member for over 50 years. It is presented to deserving accounting students.

THE CHARLES E. MERRILL SCHOLARSHIP—In 1969, the Charles E. Merrill Trust of New York City made a gift to the University to assist students of the Catholic faith.

THE ANDREW AND MARGARET CHORBA MEZICK SCHOLARSHIP—This scholarship, established by James A. and Mary P. Mezick in honor of Dr. Mezick's parents, is given each year to a qualified incoming freshman, with preference given to students with demonstrated need from the Mid-Valley area.

THE REV. J. PATRICK MOHR, S.J., SCHOLARSHIP—This need-based scholarship, established by the Scranton Jesuit Community to honor one of its own, is for graduates of Gonzaga High School in Washington, D.C.

THE ANGELO H. MONTRONE SCHOLARSHIP—This scholarship was established by Paul M. Montrone, '62, president of the Henley Group, Inc., to honor his father. It assists a Kania School of Management student who best exemplifies Mr. Montrone's father's lifelong dedication to self-improvement and ethical behavior in business.

THE DR. LESLIE E. MORGAN SCHOLARSHIP—This scholarship was established through a bequest from Dr. Morgan to assist persons studying to become members of one of the health-services professions.

THE I. LEO AND ANN MOSKOVITZ SCHOLARSHIP—Mr. and Mrs. Moskovitz, community leaders and friends of the University, established this scholarship for students who intend to pursue careers in business or science, with first preference given to those who live in Lackawanna County.

THE JOSEPH F. MULLANEY SCHOLARSHIP —A bequest from Dr. Mullaney, a distinguished alumnus of the Class of 1938, established this scholarship for physics, mathematics and science students.

THE ROBERT W. MUNLEY MEMORIAL SCHOLARSHIP—This scholarship was established by Robert W. Munley, Esq., and Judge James M. Munley to honor their father, Robert W. Munley. It supports deserving students from Lackawanna County.

THE MURPHY SCHOLARSHIP—This scholarship was established in 1957 through a bequest of Miss Margaret Murphy, a retired schoolteacher and lifelong resident of Scranton. Margaret and her sister, Katherine, made the award "in loving memory of our mother, father, and brothers" to assist needy and deserving students.

THE DR. LOUIS AND MURIEL MURPHY SCHOLARSHIP—Dr. and Mrs. Murphy, long-time friends of the University, established this scholarship to provide financial assistance to deserving and needy students.

THE JAMES NASSER FAMILY SCHOLARSHIP—This scholarship was established in 1986 by Mr. and Mrs. James R. Nasser. Preference is given to needy students from Lackawanna County.

THE NEPA APICS SCHOLARSHIP—This scholarship was established in 1987 by the Northeastern Pennsylvania Chapter of the American Production and Inventory Control Society for qualified junior or senior students enrolled in the Operations Management major of The Kania School of Management and/or active members of The University of Scranton Chapter of APICS.

THE NEWCOMBE ENDOWED SCHOLARSHIP—A series of grants from the Charlotte W. Newcombe Foundation, along with matching funds from the University, established this scholarship, which provides financial assistance to mature, second-career women students.

THE NEW YORK METROPOLITAN CHAPTER, THE UNIVERSITY OF SCRANTON ALUMNI SOCIETY SCHOLARSHIP—This scholarship assists undergraduate students on an annual basis.

THE MARIAN R. OATES MEMORIAL SCHOLARSHIP—This scholarship, established in memory of an alumna who died in an automobile accident shortly after her graduation in 1990, benefits middle-income students from New Jersey.

THE RAYMOND S. O'CONNELL SCHOLARSHIP—Shortly before his death in 1981, Raymond S. O'Connell, '42, established a scholarship for needy students. After his death, his sister, Sara E. O'Connell, completed the gift.

THE FRANK O'HARA SCHOLARSHIP—This scholarship was established in 1988 by friends and family of "Mr. University," Frank O'Hara. Mr. O'Hara served in many capacities over a long career with the University. This scholarship, established in his memory, provides assistance to deserving and needy students.

THE MARIAN M. AND PATRICK F. O'HARA SCHOLARSHIP—Income from an endowment provides unrestricted scholarships to deserving young men and women.

THE OPPENHEIM FAMILY SCHOLARSHIP—This scholarship was established by the Oppenheim family, who for many years owned and operated Oppenheim's Department Store and its predecessor, the Scranton Dry Goods Co. Income from the scholarship is used primarily for part-time, non-traditional students who need financial assistance.

THE REV. G. DONALD PANTLE, S.J., SCHOLARSHIP—This scholarship, established by the Scranton Jesuit Community to honor one of its own, provides financial assistance based on academic excellence and demonstrated need.

THE DR. ANDREW W. PLONSKY SCHOLARSHIP—Dr. Plonsky, an alumnus of the Class of 1940, longtime faculty member and co-founder of the University's computer science program, passed away in 2000. His widow, Dorothy, established this memorial scholarship for Lackawanna County residents who are studying computing science.

THE PAUL J. POINSARD, M.D., SCHOLARSHIP—Mrs. JoAnne Poinsard established this scholarship in memory of her husband, a University alumnus. The scholarship assists deserving students in premedicine.

THE REV. GEORGE C. POWELL AND MSGR. JOHN K. POWELL MEMORIAL SCHOLARSHIP—The Powell family established this scholarship to provide financial assistance to deserving and needy students who also demonstrate good character and leadership qualities.

THE REV. EDWARD R. POWERS, S.J., SCHOLARSHIP—This scholarship provides financial assistance based on academic excellence as well as demonstrated need.

THE ERNEST D. PREATE, SR., MEMORIAL SCHOLARSHIP—The family of Ernest D. Preate, Sr., Esq., established this scholarship in 1982. First consideration is given to needy students who are residents of Lackawanna County.

THE REV. J.J. QUINN, S.J., SCHOLARSHIP—This scholarship honors Rev. J.J. Quinn, S.J., professor emeritus of English. It was started by alumni and former students to honor Fr. Quinn's many years of service to The University of Scranton, his students and the community. Based on merit and need, the scholarship is available to students in all academic disciplines.

THE FRANK X. RATCHFORD MEMORIAL SCHOLARSHIP—Mrs. Patricia A. Ratchford and her family established this scholarship in memory of Mr. Ratchford, a member of the Class of 1961 who died in 1999. The scholarship, based equally on financial need and academic merit, is for residents of Scranton and Dunmore who are majoring in English, philosophy, or human resources.

THE BETTY REDINGTON SCHOLARSHIP—This scholarship was established through a bequest from Mrs. Redington, a former trustee and a long-time friend of the University and its students. The scholarship benefits students who are most in need of financial support to pursue their education.

THE FRANCIS E. AND ELIZABETH BRENNAN REDINGTON SCHOLARSHIP—This scholarship was established in 1984 according to provisions in the will of the late Francis E. Redington. It provides financial assistance to students on the basis of both ability and need. Some portion of the income each year supports scholarships for students from the Republic of Ireland.

THE JOHN CHARLES AND KATHRYN S. REDMOND FOUNDATION SCHOLARSHIP—Mr. Redmond, a prominent businessman and honorary degree recipient, established this scholarship before his death in 1989. The scholarship is given to an outstanding student who is not eligible for any direct financial aid, as specified by state or federal regulations, but who shows financial need because of the student's family situation (e.g., number of children in school needing parental support).

THE DR. RICHARD A. RENDICH EDUCATIONAL SCHOLARSHIP—This endowed scholarship was established by the family of Grace Rendich, a University alumna. Income from the fund is used to assist in the education of needy young men aspiring to the priesthood.

THE ROAD SCHOLARSHIP—James C. Barrett, '73 and president of Road Scholar Transport, established this scholarship for his employees and their families.

THE JOHN M. ROBINSON SCHOLARSHIP—This scholarship was established by John M. Robinson, who attended the University and subsequently established LPS Industries, Inc., in Newark, New Jersey. The scholarship assists promising and deserving students, with Scranton-area residents receiving first consideration.

THE PATRICK AND MARIE C. ROCHE SCHOLARSHIP—Out of their affection for the University and respect for the school's mission, Scranton natives Patrick and Marie Roche created this scholarship for eligible Lackawanna County students.

THE MARY KAY/ROCHON SCHOLARSHIP—This scholarship was set up by John Rochon and the Mary Kay Foundation. It is awarded to bright female students in economic need.

THE REV. JOSEPH A. ROCK, S.J., SCHOLARSHIP—Created in memory of Fr. Rock, who served the University as professor of history, academic vice president and, in 1970, acting president, this scholarship assists students in the Academic Development Program.

THE REV. RICHARD W. ROUSSEAU, S.J., SCHOLARSHIP—This scholarship, established by the Scranton Jesuit Community to honor one of its own, is based on academic merit and financial need.

THE ROBERT RYDER SCHOLARSHIP—Established in 1988 by John Diskin, '67, and Coopers and Lybrand as a tribute to Mr. Robert Ryder, long-time vice president for finance/treasurer, the scholarship assists local students of the city of Scranton or the borough of Dunmore, Pennsylvania.

THE CHARLES V. SABATINO, SR., SCHOLARSHIP—This scholarship was established in 1990 by Frank C. Sabatino, Esq., '76, as a memorial to his father. It is based on merit and is awarded to a sophomore who is studying history.

THE JOSEPHINE SARCINELLI MEMORIAL SCHOLARSHIP—Med Science Laboratory, Scranton, established this scholarship in 1983 to honor the memory of Josephine Sarcinelli, the office manager of the firm for many years. The scholarship is given to an incoming freshman from Lackawanna County who is in financial need and intends to major in medical technology.

THE JOHN J. SCOTT, JR., MEMORIAL SCHOLARSHIP—Mr. and Mrs. John J. Scott, Sr., established this scholarship in memory of their son, a member of the Class of 1969 who died in 2000. The scholarship is for graduates of Scranton Preparatory School, based on financial need, academic merit, and extracurricular activities.

THE SCRANTON TIMES/SUNDAY TIMES/TRIBUNE SCHOLARSHIP—This scholarship was established by the Lynett-Haggerty families to provide support to current newspaper carriers who are attending The University of Scranton. Employees and their family members also are eligible.

THE CHARLES AND JOSEPHINE SHANDER SCHOLARSHIP—A trust established this scholarship which provides financial assistance to students from Lackawanna County's Mid-Valley area who have at least one parent of Polish, Slovak, Russian or Lithuanian descent.

THE THOMAS J. SHEVLIN, JR., AND DR. JOHN F. SHEVLIN SCHOLARSHIP—Established in 1989 through a bequest from Thomas J. Shevlin, Jr., of Carbondale, Pennsylvania, this scholarship assists deserving young men and women in premedical studies.

THE MARY AND DANA SILVON MEMORIAL SCHOLARSHIP—Joseph T. Doyle, '69, and his wife, Judith, established this scholarship in memory of Mrs. Doyle's sister and niece. The scholarship is available to graduates of Seton Catholic High School in Pittston, Pennsylvania.

THE SPECIALTY GROUP, INC., SCHOLARSHIP—The scholarship was established in 1988 for graduates of Dunmore High School and Bishop O'Hara High School in Dunmore, Pennsylvania.

THE FRANCIS J. STAHL, CLASS OF 1935, MEMORIAL SCHOLARSHIP—This scholarship was established through the will of Mary T. Stahl and her husband, Francis J. Stahl, a 1935 graduate of The University of Scranton. The scholarship assists local needy students.

THE TOM AND SALSEY SULLIVAN SCHOLARSHIP—In 2000, Mr. and Mrs. Sullivan established this scholarship to be awarded solely on the basis of financial need, not academic merit.

THE AMELIA SURACI SCHOLARSHIP—This scholarship was established in 1977 by the late Mr. Frank Suraci, chairman of Parodi Cigar Corporation, to honor his wife, Amelia. After Mr. Suraci's death, contributions from the Suraci and Keating families were added to the endowment. Each year, the scholarship benefits deserving and needy students.

THE ROBERT J. AND JOAN J. SYLVESTER SCHOLARSHIP—Arthur J. and Angela V. Kania established this scholarship to honor Mr. and Mrs. Sylvester. Mr. Sylvester retired in 2001 after serving 18 years as the University's vice president for institutional advancement. The scholarship is for students from Lackawanna County with first consideration to graduates of Abington Heights, Scranton Preparatory, and Valley View high schools.

THE TRL ASSOCIATES SCHOLARSHIP—This scholarship was established by Stephen P. Hrobuchak, Jr., President of TRL, Inc., to benefit TRL employees and their children.

THE UNICO SCHOLARSHIP—The UNICO Foundation of the Scranton Chapter of UNICO National, a philanthropic group, established this scholarship in 1980 to offer financial assistance to deserving students.

THE UNITED GILSONITE LABORATORIES SCHOLARSHIP—This scholarship, established in 1999, is available to U-G-L employees and their families.

THE UNIVERSITY OF SCRANTON ALUMNI SOCIETY SCHOLARSHIP—This scholarship, established through contributions by the Alumni Society, is available to children and grandchildren of University of Scranton alumni and alumnae.

THE CHARLES J. VOLPE SCHOLARSHIP AND LECTURE FUND—Established in 1988 in memory of Charles J. Volpe, a well-respected Scranton businessman and public servant, the scholarship provides assistance for a student entering the senior year who is majoring in political science. The Lecture Fund provides for an annual lecture featuring a well-known public servant.

THE MARY AND PATRICK VOLPE SCHOLARSHIP—Angela V. Kania established this scholarship, for graduates of Old Forge High School enrolled in The Kania School of Management, in honor of her parents.

THE PAUL L. WALEFF MEMORIAL SCHOLARSHIP—This scholarship was established by the parents of Paul L. Waleff, who died in 1984 while a student at The University of Scranton. The scholarship is presented to a junior or senior who plans a career of service to persons with disabilities.

THE THOMAS P. WHITE SCHOLARSHIP—Mrs. Ilene White established this scholarship to honor the memory of her husband, Thomas. It is awarded to an education major who is a "non-traditional" student, such as a transfer student or an individual returning to school after an absence.

THE WILLIAM ZAHLER SCHOLARSHIP—In 1986, Mr. and Mrs. William P. Zahler of Mayfield Heights, Ohio, established a scholarship in memory of their son William Zahler, Jr., an associate professor of English at the University. Income from the scholarship is distributed to deserving young men and women.

ANNUAL SCHOLARSHIPS

THE AVENTIS PASTEUR SCHOLARSHIP—Each year, two graduate students who have demonstrated excellence in the field of biology and who are pursuing biochemistry master's degrees are selected for summer internships at Aventis Pasteur's Swiftwater, Pennsylvania, location.

THE RITA AND BERNARD BAGLEY MEMORIAL SCHOLARSHIP—Established in 1990 by the children of Mr. and Mrs. Bagley, this scholarship is available to residents of Sullivan County, Pennsylvania, with preference to parishioners of St. Basil's Church in Dushore.

THE DR. A.J. CAWLEY SCHOLARSHIP—In memory of Dr. A.J. Cawley of Pittston, Pennsylvania, a scholarship was established by a legacy from his sister, Miss Ellen Cawley. A scholarship is given each year to a student majoring in electrical engineering.

THE LEN AND DEBORAH GOUGEON ST. ANN'S SCHOLARSHIP—Established in 1986 through a gift from Drs. Len and Deborah Gougeon, this scholarship, based on need, provides assistance to a graduate of St. Ann's Elementary School or a member of St. Ann's Monastery Parish in Scranton

THE JOSEPH P. HARPER SCHOLARSHIP—A scholarship was established in 1967 to honor the memory of Joseph P. Harper, professor of physics. An annual scholarship is given to a senior physics major upon the recommendation of the physics department and with the approval of the director of financial aid. The department of physics presents, with the scholarship, a citation reminding the recipient of the high scholarly ideals, exemplary life, and dedicated service of Professor Harper.

THE KATHRYN AND BERNARD HYLAND MEMORIAL SCHOLARSHIP FOR EXCELLENCE IN BIOLOGY—A gift from alumnus Bernard V. Hyland, M.D., made in loving memory of his parents, established an endowment in 1980 to perpetuate this annual scholarship. The scholarship is presented to a graduating senior from the biology department, who, in the opinion of the department's faculty, has achieved distinction based on academic excellence in biology, personal integrity, and concern for others.

THE LACKAWANNA COUNTY LAWYERS' AUXILIARY SCHOLARSHIP—Established in 1982, this scholarship is annually presented to an outstanding graduating senior from Lackawanna County to provide scholarship assistance in the first year of law school. The scholarship is given directly by the Lawyers' Auxiliary, upon the recommendation of the University pre-law advisor.

THE MURRAY INSURANCE AGENCY, INC., SCHOLARSHIP—This scholarship is for deserving local students with first consideration to residents of the city of Scranton.

THE CHARLOTTE W. NEWCOMBE FOUNDATION SCHOLARSHIP—This scholarship provides aid for mature, second-career women students.

THE O'MALLEY & HARRIS PRE-LAW SCHOLARSHIP—This scholarship, sponsored by the law firm, O'Malley & Harris, P.C., is based on the outcome of an annual competition among full-time undergraduates at both The University of Scranton and Marywood University. Entry information is available from either school's pre-law advisor.

THE CHRISTOPHER JASON PERFILIO MEMORIAL SCHOLARSHIP —Christopher Perfilio passed away the summer before his senior year. His parents and older brother established this scholarship in his honor to assist philosophy and theology/religious studies students, as well as students in the Special Jesuit Liberal Arts program, who have records of high academic achievement and who demonstrate financial need.

THE BERNARD SHAIR MEMORIAL SCHOLARSHIP—This scholarship, established by family, friends, and colleagues of Dr. Shair through the Scranton Area Foundation, is presented annually to a graduating senior of The University of Scranton who has been enrolled in an accredited dental school.

THE ARMOND AND BETTY STRUTIN SCHOLARSHIP—This scholarship, created out of the generosity and commitment to The University of Scranton of Armond and Betty Strutin, is distributed each year to deserving students identified and designated by the Purple Club.

BIENNIAL SCHOLARSHIP

THE CORCORAN-CONDRON SCHOLARSHIP —Biennially the Society of the Friendly Sons of St. Patrick of Lackawanna County provides funds for a University of Scranton student or students to enjoy the benefits of studying for one or two semesters at a university in Ireland.

ENDOWED CHAIRS

THE ALPERIN CHAIR IN BUSINESS ADMINISTRATION—Established by an endowment, this academic chair was set in place in 1980 through the gifts of three Scranton businessmen, Joel, Irwin and Myer Alperin, and their families. The late Joel Mitchell Alperin was the originator and the principal sponsor of the chair and its endowment. Income from the Alperin brothers' gift is applied to the salary of a professor in The Kania School of Management.

THE KATHRYN AND BERNARD HYLAND CHAIR IN BIOLOGY—The Kathryn and Bernard Hyland Chair in Biology is an endowed professorship established by Bernard V. Hyland, M.D., '47, in honor of his parents. The professorship supports teaching and scholarship of a distinguished member of the biology faculty at the University.

THE CHAIR IN JUDAIC STUDIES—Income from an endowment established by alumni and friends of the University makes it possible for the University to invite, for short visits to Scranton, Judaic scholars from Israel or other parts of the world, for public lectures and meetings with students and faculty.

THE JOSEPH T. AND FRANK M. McDONALD CHAIR—Income from an endowment established by George and Dr. Herbert McDonald is used primarily to support the pre-law program, including support of the pre-law advisor, internship program, and advisory team. Income is also used to provide scholarship assistance to deserving students in pre-law majors.

THE PIUS X TEACHING CHAIR OF THEOLOGY—Established in 1976 by an anonymous gift and the assignment of a matching grant from the University's Commitment to Excellence capital campaign, this chair is occupied by a priest, or jointly by a set of priests, of the Diocese of Scranton. The chairholders are nominated by the faculty of St. Pius X Seminary and approved by the faculty of the department of theology and religious studies at the University.

OTHER ENDOWMENTS

THE NEH ENDOWMENT—This endowment was established through a challenge grant from the National Endowment for the Humanities. It supports the acquisition of materials for the humanities collection in the Weinberg Memorial Library.

THE JESUIT COMMUNITY CONTRIBUTION—This gift of funds, returned to the University from payments made to Jesuits for their services, has enabled the University to offer many scholarships from its operating budget and has substantially aided the building program.

THE ROSE I. KELLY AWARD—A University of Scranton alumnus, Joseph Wineburgh, Ph.D., set in place an endowment to link the efforts of elementary and secondary school teachers to the achievements of college students. Each year, an outstanding student is selected by a committee appointed by the academic vice president. The Rose I. Kelly Award winner is asked to name a high school or elementary teacher who most influenced his or her pre-college academic preparation. Both the student and the teacher from pre-college days are honored at a campus ceremony. Dr. Wineburgh established the program to honor an elementary teacher, Rose I. Kelly, who greatly influenced his life.

THE REV. JOHN J. LONG, S.J., FUND—Contributions to this fund were made by friends of the Rev. John J. Long, S.J., president of the University, 1953-1963, on the occasion of his Golden Jubilee in the Society of Jesus and later as a memorial after his death in 1971. The fund is invested and the income therefrom is used for projects and programs concerned with the spiritual growth of students.

THE LOYOLA LECTURE—The Jesuit Community serving The University of Scranton has endowed a lecture program intended to bring distinguished Jesuit speakers to campus. Named in honor of St. Ignatius Loyola, founder of the Society of Jesus, this fund can also support visits by other scholars capable of assisting the University community to a better appreciation of its Jesuit heritage.

THE HARRY AND HELEN MACK AWARD FUND—This award was established through a unitrust by Mrs. Helen Mack and is restricted to The University of Scranton's Judaic Studies Program. It assists students and the community in learning about Jewish heritage and culture.

Academic Programs

The University's academic programs for undergraduates are offered through three day schools, The College of Arts and Sciences, The Kania School of Management, and The Panuska College of Professional Studies; and through its division for non-traditional students, Dexter Hanley College. The schools share a common General Education program and offer baccalaureate degrees in 57 fields.

DEGREE PROGRAMS

The University offers the following degree programs for the undergraduate student:

BACHELOR OF ARTS

Classical Languages
Communication
English
French
German
History
International Language-Business
Philosophy
Spanish
Theatre
Theology and
Religious Studies

BACHELOR OF SCIENCE

Accounting
Accounting Information Systems
Biochemistry
Biology
Biomathematics
Biophysics
Chemistry
Chemistry-Business
Chemistry-Computers
Computer Engineering
Computer Information Systems
Computer Science
Criminal Justice
Economics
Early-Childhood Education
Electrical Engineering
Electronic Commerce
Electronics-Business
Elementary Education
Enterprise Management Technology
Environmental Science
Exercise Science
Finance
Gerontology
Health Administration
Human Resources Studies
Human Services
International Business
International Studies
Liberal Studies*
Management
Marketing
Mathematics
Media & Information Technology
Medical Technology
Neuroscience
Nursing
Occupational Therapy††
Operations Management
Physical Therapy†
Physics
Political Science
Psychology
Secondary Education
Sociology
Special Education

ASSOCIATE IN ARTS*
ASSOCIATE IN SCIENCE*

Business
Computer Engineering
Computer Information Systems
Criminal Justice
Electrical Engineering
Gerontology
Health Administration
Human Services
Political Science
Sociology

* Available through Dexter Hanley College only.

† Students entering the Physical Therapy program will earn a B.S. in Health Sciences after completing the first four years of a five-year program and a Master of Physical Therapy degree (M.P.T.) after completion of the fifth year.

†† Students entering the Occupational Therapy Program will earn a B.S. in Health Sciences after completing the first four years of a five-year program and a Master of Science degree in Occupational Therapy after completion of the fifth year.

MINORS

Minors, which require a minimum of 15 hours, are currently available in the following fields:

Accounting
Art History
Biochemistry
Biology
Business
Chemistry
Coaching
Communication
Computer Information Systems
Computer Science
Criminal Justice
Economics
Electronic Commerce
English
Finance
Foreign Language
Gerontology
Health Administration
History
Human Resources Studies
Human Services
International Studies
Leadership
Management of People and Teams
Management of Structures and Systems
Mathematics
Music History
Operations Management
Philosophy
Physics
Political Science
Psychology
Sociology
Theatre
Theology/Religious Studies
Writing

Consult departmental listings for details.

Courses counted toward a major may not be counted toward the first 15 credits of a minor. However, courses counted toward a cognate or general-education courses may be used to fulfill minor requirements.

SPECIAL PROGRAMS

DOUBLE MAJOR PROGRAM

Students at the end of the first semester of freshman year or thereafter may elect to pursue a second field of concentration in addition to their first major. The permission of the appropriate dean and the agreement of the two pertinent departmental chairpersons should be obtained in writing at this time and placed in the student's file. A second major will consist of all major and required cognate courses. ***For students matriculating in fall 1997 and later, completion of a second major will also require completion of any general education courses that are explicitly required as part of the second major.*** Except for double majors involving education and a content area, a second major will not be awarded for fewer than 18 credits in the second field which are not counted as part of the first major. The credits in the General Education area need not, of course, be repeated. Students completing double majors receive only one degree and diploma.

THREE-YEAR BACHELOR'S DEGREE PROGRAM

The University of Scranton's curriculum and academic calendar allow qualified students to attain their bachelor's degrees within three years — thus considerably reducing the overall cost of their undergraduate education and allowing the student to enter the marketplace or begin graduate and professional studies a year earlier. While Advanced Placement or College Level Examination Programs credits (see Index) are very useful for this, a student who does not bring these from high school may still complete the degree program in most majors within three years through the use of January intersession courses and/or summer-school sessions. The presumption is that normal academic progress is being made. Typically, two summer schools (12 credits each) and two or three January intersessions will suffice. Especially qualified students may be allowed overloads from the appropriate dean further to reduce this — as will Advanced Placement credits. The dean should be contacted as early as possible in a student's career in order to facilitate the needed scheduling. Entering freshman students may want to use the summer school immediately following their high school graduation to further this three-year program; the Director of Admissions should be consulted with respect to this. Details on the special Scranton Preparatory/University Seven Year (4-3) High School-College Degree Program are available from the dean of studies at Scranton Preparatory.

COMBINED BACCALAUREATE/MASTER'S DEGREE PROGRAM

Undergraduate students of the University, with outstanding undergraduate records, may be eligible to be accepted and dually enrolled in a master's degree program prior to graduation. A student who has achieved an overall Grade Point Average of 3.5 after 64 semester hours, 3.4 after 80 semester hours, 3.3 after 96 semester hours, or 3.2 after 112 semester hours (with at least 32 graded hours at the University) may apply for early admission to a master's degree program through the Combined Baccalaureate/Master's Degree Program. Master's degree programs that accept Combined Baccalaureate/Master's Degree students and details of those programs are found in the section on The Graduate School.

STUDY ABROAD PROGRAM

The Study Abroad program at The University of Scranton provides an opportunity for students to continue studies they have begun at The University of Scranton at universities around the world. To date, University of Scranton students have studied in thirty-five different countries and have represented thirty different majors.

The Study Abroad experience typically takes place during the junior year; however, planning should start during the freshman year. In order to participate in foreign study, students need a minimum Grade-Point Average (GPA) of 3.0 and permission from their departments and deans. Students with GPA's below 3.0 may request a waiver of this requirement from the director of the Study Abroad program. Additionally, students are expected to have conducted themselves according to the standards of The University of Scranton, as they are expressed in the student handbook of the University.

Pre-approved courses taken at foreign universities fulfill graduation requirements at The University of Scranton. In addition to helping complete their degree programs, students who study overseas for a single term will satisfy one of their cultural-diversity requirements. Students who spend a year studying abroad will satisfy two cultural-diversity requirements. Interested students should contact either Michael Simons, Study Abroad Advisor, or the Associate Dean of the College of Arts and Sciences.

OFFICE OF FELLOWSHIP PROGRAMS

The Office of Fellowship Programs, located in St. Thomas 312, assists students preparing to make application for national and international awards, including, among others, the Truman, Mellon, James Madison, National Science Foundation, Goldwater, Soros, Churchill, Marshall, and Rhodes Scholarships. The University Director of Fellowship Programs, Dr. Mary Engel, advises students with outstanding academic records in the identification of appropriate fellowships and scholarships. Members of the Matteo Ricci Society, including the directors of the Undergraduate Honors Program, the Special Jesuit Liberal Arts Program, and the Business Leadership Program, as well as the faculty advisors for the Truman, Goldwater, Fulbright, and National Science Foundation, provide guidance to the Fellowship Program.

During the 2002-2003 academic year, Stephanie Tessing, a junior majoring in neuroscience and philosophy, was named a Truman Scholar, one of only 77 students in the country to receive this award. A junior Accounting major, Ryan Surace, was one of fifty students in the country to receive a State Farm Companies Exceptional Student Fellowship. Erin Brodie, a junior majoring in mathematics and philosophy, was one of fifty students to be named a Junior Fellow in the Joint Program on Survey Methodology; Erin will spend her summer working at the Census Bureau. Rachel Henry, a junior English major, was one of three students in the country to receive a Sigma Tau Delta Junior Award; Heather Theiss, a senior English and philosophy major, received one of the three Sigma Tau Delta Senior Awards. Susan Firestone, a Chemistry-Business major, was awarded an IIE Freeman-Asia Award to support her study in Beijing, China. Ginger Serifovic received a Gilman Scholarship to support study at various sites in South America, Africa, Asia, and the Caribbean. Michael Venn, a junior political science major, has received a summer internship with the State Department.

During the 2000-2001 academic year, two juniors—April Puscavage and Heather Theis—were among the eight Pennsylvanians named National Finalists in the Truman Scholarship competition. Additionally, Les Carter, a sophomore majoring in mathematics and philosophy, was selected as a Junior Fellow in the Joint Program on Survey Methodology; he spent the summer of 2001 working at the Bureau of Labor Statistics. Two senior athletes, Joseph Fent and Nicole Bayman, received NCAA Postgraduate Scholarships Sarah Gazdalski, a senior accounting major, received an Exceptional Student Fellowship from the State Farm Companies Foundation. Three students, Colleen Duffy, Inge Fenger, and Ryan Surace, received IIE Freeman Asia Awards to support study in Beijing, China.

ACADEMIC SUPPORT SERVICES

HARRY AND JEANETTE WEINBERG MEMORIAL LIBRARY

Opened in 1992, this 80,000-square-foot, five-story building is named for Harry and Jeanette Weinberg. Library holdings include 432,039 volumes, 1,928 print periodical subscriptions, over 9,150 full-text electronic journals, and 493,710 microform pieces. The facility includes group-study rooms; quiet study areas; a twenty-four-hour study room with computer lab; and the Heritage Room, a large reading room on the fifth floor overlooking the campus and community. There is a Java City Coffee Bar in the Pro Deo Room. Over 104 databases are available on the World Wide Web. Among the Library's fulltext online resources are Lexis-Nexis, ProQuest, Project Muse, IDEAL, Annual Reviews, JSTOR, Emerald Library, Global Access, Newsbank, OED, Past Masters, Contemporary Women's Issues, ECO and FirstSearch. A proxy server gives users remote access to these databases. The University Archives and Special Collections houses University historical records, rare books, faculty publications, and other special collections. The Media Resources Collection, located on the first floor, holds 13,085 non-print items, including videocassettes, records, films and filmstrips. In addition to the Library's own Online Public Catalog, users can search NPLN, Northeast Pennsylvania Library Network virtual catalog of local libraries, Jesuit libraries and PALCI, Pennsylvania academic libraries who participate in a direct borrowing program. With PALCI members, the Library also shares 1900 fulltext books that users can read or borrow online. There are 80 Internet workstations in the Library, including 33 machines available 24 hours a day, seven days a week in the Pro Deo Room and ten laptops that are available at the circulation desk. Throughout the building, wireless connection to the internet is available for laptops. In addition to these machines, students may use ResNet ports to plug personal laptops into the network in the first floor Pro Deo Room and group study rooms.

Library hours are posted on campus, on the Internet, and on a recording which can be heard at 941-7525. It is open 99.5 hours per week, with extended hours during exam periods. For information about the Library, its services, and resources, see the Weinberg Memorial Library homepage on the World Wide Web (http://www.scranton.edu/library) or select the Library from the University's homepage (www.scranton.edu). Some required readings for courses are available through ERES, an electronic reserve reading database over the Internet. The Library conducts an extensive user-education program to orient and instruct students in resources and research techniques.

THE CAS ACADEMIC ADVISING CENTER

The Academic Advising Center, located in St. Thomas Hall 309, serves all freshmen in The College of Arts and Sciences. Staffed by professional advisors and by faculty advisors from a wide variety of disciplines, the Academic Advising Center offers a comprehensive program of academic advising throughout the freshman year. In addition to individual advising, the Academic Advising Center also offers specialized Freshman Seminars for students in the CAS common curriculum. Faculty advisors are available to students from 8:30-4:30 Monday through Friday. They provide assistance with orientation, pre-registration, drop-add, general-education course selection, declaration and change of major, and assessment of academic performance and goals.

THE CPS ACADEMIC ADVISING CENTER

The Academic Advising Center, located on the first floor of McGurrin Hall, serves all students in The Panuska College. Staff are available, during the academic year, Monday through Friday from 8:30 a.m. to 4:30 p.m., to provide individual assistance with academic advising, registration, assessment of academic performance and career goals. The Center also works closely with other campus resources to provide comprehensive advisement opportunities. Faculty mentors are available to students within their academic departments.

THE KANIA SOM ACADEMIC ADVISING CENTER

The Academic Advising Center, located in Brennan Hall Suite 206, serves all students in The Kania School of Management. Staff advisors are available from 8:30 a.m. to 4:30 p.m., Monday through Friday, to provide assistance with pre-registration, major and general education course selection, and assessment of academic performance and goals. The Advising Center works closely with other campus resources to provide comprehensive advising services.

THE LEARNING RESOURCES CENTER

The Learning Resources Center is located on the second floor of O'Hara Hall. It was established to help students accomplish their academic goals at the University. The LRC provides services to supplement those offered in the classroom. The Center is staffed by professional staff and peer tutors. Academic services are available for diagnosed learning-disabled students. A Reading Specialist is also on staff for testing and consultation. Assistance is available on a drop-in or referral basis. Services are provided to students with learning disabilities in compliance with Section 504 of the Rehabilitation Act. The Learning Resources Center is open Monday through Thursday, 8:30 a.m. to 7:00 p.m., and Friday from 8:30 a.m. to 4:30 p.m. A writing center is available to students seeking assistance with papers. It is open Monday through Friday from 10:00 a.m. to 6:00 p.m.

OFFICE OF THE REGISTRAR

As part of the Academic Affairs Division, The Office of the Registrar supports the educational mission of the University by connecting students to the faculty, curriculum and classroom via the course-scheduling and registration process. The Registrar also documents and validates the product of this dynamic connection in the form of schedules, rosters, grades, evaluations, transcripts and diplomas.

The Registrar's office serves students on a daily basis by answering questions, issuing transcripts, certifying enrollment status, and distributing forms and schedules. In addition, students may obtain information about academic policies and procedures, and important dates and deadlines.

The office publishes the master schedule of courses twice each year in October and March, conducts registration, collects and records grades, certifies degree eligibility and manages aspects of commencement.

Course registration for returning students is conducted in April for the summer and fall, and in November for spring and intersession via UIS, the University Information System on the World Wide Web. Mid-term and final grades are also available on UIS.

The Registrar's homepage on the web at http://www.uofs.edu/academic/regmain.html includes links to the University catalog, academic calendar, final-exam schedule, course schedules and descriptions; a student grade-point-average calculator, registration instructions, forms, commencement information, and the University Information System.

The University Information System (UIS) on the web at https://uis.uofs.edu includes secure links to academic records, registration options, student class schedules, address information, tuition accounts and financial-aid information.

Located in St. Thomas Hall 301, the Office of the Registrar is open Monday-Friday, 8:30 a.m. to 4:30 p.m. For more information please contact us at (570) 941-7221 or via email at brillm1@uofs.edu

ACADEMIC REGULATIONS

ACADEMIC CODE OF HONESTY

The Academic Code of Honesty addresses behavioral integrity in the academic work of the University. Students have responsibility for governing their own conduct in compliance with the Academic Code of Honesty. Conduct which constitutes a violation of the Academic Code of Honesty includes plagiarism, duplicate submission of the same work, collusion, false information, unauthorized use of computers, theft and destruction of property, and unauthorized possession of tests and other materials. Conduct which violates the Code will ordinarily result in the assignment of the grade "F" by the instructor. The steps which follow may include a discussion with the instructor, an informal meeting with the dean of the college and a hearing before the Academic Dishonesty Hearing Board. For more information about academic dishonesty and the procedures for responding to it, the Academic Code of Honesty should be consulted. It is available in the deans' offices, in the Student Handbook and on the University's web site.

DEGREE REQUIREMENTS

Students beginning the first term of their degree/certificate program (matriculating) at The University of Scranton in the 2002-2003 academic year are thereafter governed by the curricular policies stated in this catalog. Requirements governing a student's major are those in effect at the time a major is formally declared and approved. First-year students admitted in 2002-2003 will follow the general-education requirements of this catalog.

If a student interrupts his/her education without a leave of absence, the catalog requirements in effect at the time of readmission will apply. Students on an approved leave of absence retain the same requirements they had when they matriculated if their leaves do not extend beyond a year. In order to earn a bachelor's degree from The University of Scranton the student must complete all the courses prescribed in the curriculum table of the major. No student will be eligible for graduation who has not removed all failures in required courses or who has not earned the minimum 2.00 (C average) grade-point average.

Students must maintain a 2.00 grade-point average in courses required for the major; students who do not meet this standard may be placed by their dean in a "Goal Attainment" semester (for students determined to raise the grade-point average and remain in the major); an "Exploratory" semester (for students wanting to explore possible new majors); or allowed to change to a new major (if the department of the new major approves the requested change). Students must either meet the standard in the original major or change to a new major within two semesters (in the case of Dexter Hanley College, within 30 credits). Students who remain in the "Goal Attainment" and/or "Exploratory" semester program for more than two semesters will be subject to dismissal by their dean.

The University of Scranton provides the opportunity for students who have completed degree requirements to graduate at one of four points throughout the academic year: summer graduation (graduation date: August 31), fall graduation (graduation date: December 31), intersession graduation (graduation date: January 31), or spring graduation (graduation date is the actual date of the commencement exercises, published in the academic calendar at the beginning of each academic year). Commencement exercises are held once in the academic year, following the completion of spring semester. Normally students who are certified for graduation for summer, fall, intersession, or spring graduation may participate in the commencement exercises.

Certification of graduation, receipt of a degree, and permission to participate in the commencement exercises are not automatic. Seniors expecting to complete degree requirements in time for spring graduation must make formal application through the Registrar's Office or Dexter Hanley College by February 15. Students who are expecting to complete degree requirements for summer, fall or intersession graduation must make formal application a minimum of four weeks prior to the end of the appropriate term.

A degree represents the successful completion of the entire undergraduate curriculum, including general education requirements, cognates, basic skills courses and electives, as well as major requirements. Students graduating with multiple majors receive a single degree.

GRADING SYSTEM

Grade reports are mailed to all students at the end of each semester and these become part of the official record of the student. Freshmen receive mid-semester grades to inform them of their progress. Upper-class students receive notice at the mid-semester if they are "deficient" and in danger of failing the course at that time. Grades are also available via UIS.

A, A-	Excellent (outstanding and/or original work)
B+, B, B-	Good
C+, C	Satisfactory
C-, D+, D	Passing but well below average
F	Failure (below minimum acceptable standards)
W	Withdrew officially; deadline is one month before the last day of classes for the semester.
I	Incomplete must be removed by mid-term of following semester.
IP	In Progress must be removed by the last day of the following semester. (Normally for honors thesis classes only)
S	Satisfactory—not figured in Grade Point Average (GPA)
U	Unsatisfactory—equivalent to failure; not figured in GPA
Audit	Course not taken for credit.
CR	Credit by exam
NG	No grade assigned
TC	Transfer credit
CS	"Credit Satisfactory"—notes a course taken under the "credit-no credit" option in which a grade of "C" or higher is earned; counts in hours earned toward degree but not in GPA.
CD	"Credit Deficiency"—notes a course taken under the "credit-no credit" option in which a passing grade less than C(C-, D+, D) is earned; counts in hours earned toward degree but not in GPA.
NC	"No Credit"—notes a course taken under the "credit-no credit" option in which a passing grade is not earned; does not count toward hours earned toward degree and does not count in GPA.

AUDIT: Entry of the audit grade (AU) on a transcript assumes satisfactory attendance. The student should consult with the instructor as to what constitutes satisfactory attendance. A change to audit can be made only by passing students and before the end of the first half of a semester.

INCOMPLETE: If a course has not been completed because of illness or other serious reason, an incomplete may be given. To remove this grade the student must satisfy all course requirements by mid-term of the following semester. Any course not completed by this time will result in a grade of F.

REPEAT OF COURSE: Special permission is not needed to repeat courses. Recording of grades for repeated courses shall be governed by the following conditions: 1. Credit for a course will be granted only once; 2. Credit for the course will be lost if the course is repeated and failed; 3. The most recent credit and grade will count toward the grade-point average with this exception: a "W" grade cannot replace another grade; 4. Each attempt to complete a course will be reported on the student's transcript., e.g. a course with a grade of "F" will continue to appear on the transcript even after the course has been repeated with a passing grade. However, the credits from the initial failed attempt will not be used in the calculation of the cumulative grade-point average.

CHANGE OF GRADE: A student who believes the grade received for a course is unreasonable should first appeal the matter to the professor, whose decision is normally final. The student has the right, however, to appeal to the faculty member's chairperson, who will make a recommendation in writing to his or her dean. The student may request the dean to review the matter. The decision of the dean is final. Ordinarily, no grade change will be considered unless it has been reviewed by the dean's office within one month from the time the original grade was sent to the student.

FINAL EXAMINATION CONFLICTS

1. When a student has three or more examinations scheduled on the same day, according to the examination schedule issued by the Registrar's Office, it is the student's option whether to take all three examinations on the same day or to have one rescheduled.
2. If the student wishes to have one of the three examinations rescheduled, the examination with the lowest priority, based on the following order of priority, will be rescheduled.

   Major Course – first priority
   Cognate course – second priority
   Elective course – third priority
3. Where a conflict exists between two courses of the same kind (e.g., two cognates or two electives), the more senior professor — in terms of years of service at The University of Scranton — will have first priority.
4. If the student wishes to reschedule a conflict examination, he/she must advise the faculty member prior to the last week of class. If an appropriate resolution cannot be reached between the student and the faculty member, the student should contact his/her dean.

COURSE NUMBERING SYSTEM

Courses appearing in this bulletin are numbered according to the system described below. The *first* digit of any course number indicates the level of the course; the second and third digits specify categories of courses. Levels at which courses are offered include the following:

100-199	Introductory courses	400-499	Advanced undergraduate courses
200-299	Lower division courses	500 and above	Graduate courses
300-399	Upper division courses		

In cases where no specific prerequisite is listed in the course description, courses at the 300 or 400 level assume Junior or Senior standing and appropriate background in the discipline of the course.

Categories in which courses are offered are indicated according to the following system:

___00–___09	General-education courses not available for major credit	___82–___83	Independent study courses
		___84	Special topics
		___85–___89	Honors courses
___10–___39	Courses which may apply either to major or general-education requirements	___90–___91	Seminars
		___92–	Service Learning
		___93–___94	Research
___40–___79	Courses available for major (also minor and required cognate) credit	___95–___96	Travel courses
		498–499	Thesis
___80–___81	Practicum, Internship or Co-op courses		

Labs are indicated by an **L** following the number of the corresponding lecture courses. Courses in the Special Jesuit Liberal Arts Program are indicated by a **J** following the course number; those in the Honors Program are indicated by an **H** following the course number.

GRADE-POINT AVERAGE

A standard used in judging a student's performance is the Grade Point Average, determined as follows:

Each semester hour of credit with a grade of A is valued at 4 quality points; A- at 3.67 quality points; B+ at 3.33; B at 3.0; B- at 2.67; C+ at 2.33; C at 2.0; C- at 1.67; D+ at 1.33;

D at 1.0. An F yields no quality points. Thus, for example, a three-credit course with a grade of A yields 12 quality points; a B yields 9; a C yields 6.

The Grade Point Average, commonly abbreviated GPA, is computed by dividing the total number of quality points earned by the total of grade-point average credit hours. For example, 15 credit hours, all at C grade, would earn 30 Quality Points or a 2.0 GPA (30/15).

The total number of grade-point average credit hours includes those courses with final grades of F as well as A, B, etc.; CD, CR, CS, I, NC, P, S, W, TC and U credit do not count toward the GPA. This grade-point average applies only to courses taken at The University of Scranton and is not affected by credit transferred from other colleges.

A grade-point average listing is made at the end of each semester. On the basis of his or her cumulative grade-point average, a student's rank in class and eligibility for honors at graduation are determined.

GRADUATION HONORS

To be eligible for graduation and for honors at commencement, a student must have completed a minimum of 63 credit hours of work at The University of Scranton.

Summa cum laude.....3.85 Grade Point Average in all subjects
Magna cum laude.....3.65 Grade Point Average in all subjects
Cum laude.....3.50 Grade Point Average in all subjects

DEAN'S LISTS

To be eligible for the Dean's List, College of Arts and Sciences, Kania School of Management, and Panuska College of Professional Studies students must earn 12 or more credit hours which count toward the semester GPA (credit hours of "P" and "S" grades are not counted toward this requirement). Dexter Hanley College students need to complete six or more credit hours which count toward the semester GPA to be eligible for the Dean's List. Of the eligible students, those who earn a 3.50 or higher semester GPA and no grade of CD, D, D+, F, I, NC, NG, or U are named to the Dean's List for that semester. Students placed on the Dean's List will have this distinction indicated on their transcripts. A student's GPA will be recalculated when the last temporary grade (I, NG) is replaced by a final grade. If this new GPA meets the above standard, the student will be placed on the Dean's List.

PROBATION AND DISMISSAL

One semester of probation is granted to students whose cumulative GPA falls below 2.0, or who otherwise are in danger of dismissal. A second semester of probation is not automatic; a student who does not remove himself or herself from probation after one semester is subject to dismissal, unless excepted by the appropriate dean. Students who receive an F while on probation are also subject to dismissal, as is any student who incurs two F's in one semester, or who has accumulated three F's which have not been successfully retaken. Probationary status may be removed through adequate achievement in summer school or January intersession at The University of Scranton.

Students on academic probation are allowed to take no more than 14 credits (in Dexter Hanley College, no more than 12 credits) during the fall or spring semesters without explicit written approval of the appropriate dean. Students on academic probation are ineligible for participation in extra-curricular activities without the express written approval of the moderator, the student's academic advisor, and the student's dean.

A student placed on academic probation for a second semester may not participate in any extra-curricular activity until such time as he or she is formally removed from academic probation.

It is University policy in the case of a student dismissed from another institution or a college of the University itself that this student will not be allowed to register for courses in any of the colleges of the University in the semester following dismissal.

ENROLLMENT STATUS

To be considered a full-time student, undergraduate students must be registered for at least 12 credits iin any given term or semester, regardless of the number of credits remaining to complete degree requirements.

ATTENDANCE POLICY

Students are expected to attend all scheduled meetings of courses in which they are enrolled. Every student is responsible for all material presented and announcements made during any class. Attendance policies for individual courses are determined by the instructor and must be promulgated in writing in the course syllabi.

THE "CREDIT-NO CREDIT" OPTION

The "credit-no credit" option is designed to encourage students to take courses of interest but outside their concentrated areas of study. Courses used to fill free elective and free cognate requirements are eligible to be taken with this option. Courses taken under the "credit-no credit" option count toward the accumulated semester hours for the degree, but they are not included in the grade point average calculation.

A student with a cumulative GPA of 2.67 or greater, and who has accumulated at least 60 credits towards the degree, may elect to take some courses on a "credit-no credit" basis. Students may apply for the "credit-no credit" option by seeking approval from their dean's office and filing the completed forms with the registrar by the end of the second week of the semester (or by the second day of the summer and Intersession sessions). The option cannot be reversed after the fourth week of class (or the fourth day in the summer and Intersession sessions). Courses used to fulfill general education requirements, courses in the major and cognate, as well as courses in a minor or concentration, and those used to fulfill requirements in the Honors, SJLA, and Business Leadership programs **may not** be taken under the "credit-no credit" option. Students may take no more than a total of four courses under this option, and no more than one per semester (other than internships, practicums, or physical education courses). Students receive the following transcript notations under the "credit-no credit" option: A grade of C or higher yields a **CS** (credit satisfactory) notation; a grade less than C (C-, D, D+) yields a **CD** (credit deficiency) notation; a grade less than passing (F) yields an **NC** (no credit) notation.

READER COURSES (INDIVIDUAL STUDY)

The primary purpose of a reader course is to enable a University of Scranton student in good academic standing to pursue a course of study not otherwise offered during the terms in which the reader is taken. Readers **may not** ordinarily be used to fulfill general education requirements. Students may take no more than one reader per term, nor more than one reader per year, on average, during the course of their degree programs. Readers are to be taken for the same number of credits as are granted similar courses in the discipline in which the reader is offered. Readers may not ordinarily be used to repeat failed courses. Exceptions to these policies must be approved by the dean of the student's college and by the dean of the school offering the course.

UNIVERSITY OF SCRANTON/MARYWOOD UNIVERSITY CROSS REGISTRATION

This program is available to second-, third-, and fourth-year students in good academic standing. Transfer students are eligible after completing their first year at The University of Scranton.

Students may take two such courses (equivalent to six credits) during the calendar year (January - December), with the approval of their advisor and dean, and on a space-available basis.

DROPPING AND ADDING CLASSES

Students may add classes anytime between the initial registration period and the fifth class-day from the start of a semester. The last day to drop a class for a 100% tuition refund is usually the tenth calendar day from the first day of classes for a semester and the second calendar day from the first day of classes for intersession or summer session. (See the University Calendar, inside front cover of this catalog.) The refund schedule applies only to students paying on a per-credit basis or completely withdrawing from the University.

Students who wish to drop one or more classes, but who plan to continue attendance in at least one other class during the term, need to secure their dean's permission to drop classes. Classes may be dropped until the last day for a tuition refund of any amount. The last day to drop courses is usually the thirty-first calendar day of a semester and the fourth calendar day of intersession and summer session. A drop is treated as if the student never registered for the course.

WITHDRAWAL FROM A COURSE

After the end of the drop period, students may still withdraw from a course until the published deadline and receive a "W" grade.

Students wishing to withdraw from a course should first discuss the matter with the instructor. Students who wish to withdraw from one or more courses, but who plan to continue to attend at least one course for the term, need to secure the Instructor's signature and the student's dean's approval.

Those students who wish to withdraw from their last course(s) must complete the Withdrawal/Leave of Absence Form. The completed form must be taken to the Office of the Registrar or to Dexter Hanley College (DHC students). Failure to withdraw officially from a course(s) may result in a failing grade(s). The deadline for course withdrawal is indicated on the University academic calendar. This deadline is approximately 30 days before the last class-day for the semester and a proportionate period of time for a short session.

WITHDRAWAL FROM THE UNIVERSITY

Students wishing to drop or withdraw from their last course(s), thereby discontinuing their enrollment, must secure their dean's permission to withdraw from the University. Students should also discuss any questions with their advisor or department chairperson. The form for withdrawal may be obtained in the Registrar's Office, the Dexter Hanley College office, the academic advising centers, or the academic department chairpersons' offices. University withdrawal is not official until all signatures required on the Withdrawal/Leave of Absence Form have been obtained and the form is delivered to the Registrar's Office or Dexter Hanley College (DHC students).

Any tuition refund will be determined by the official date of University withdrawal. No grades will be recorded on the student's academic record if the official University withdrawal date is on or before the last day for 25% tuition refund. "W's" will be recorded for course work if the official University withdrawal date coincides with the course withdrawal period. Final grades will be recorded for course work if the official withdrawal date is after the course withdrawal period for the term.

A student who fails to enroll for a semester and has not arranged for a leave of absence,must apply for readmission to the University and, if accepted, will need to satisfy the catalog requirements in effect at the time of readmission.

LEAVE OF ABSENCE

Students may request their dean's approval for a leave of absence by completing the Withdrawal/Leave of Absence Form. Graduation requirements in effect for the students at the time the leave begins will remain in effect for those students when enrollment is resumed at the end of the leave on the following conditions:

* students on a leave of absence may not take courses at another institution without first securing written approval from their dean;
* the leave is limited to one semester, but may be renewed for one additional semester by the student's dean (documentation may be requested by student's dean);
* ordinarily the students must be in good academic and disciplinary standing at the University when the leave begins;
* students on leave must place their addresses and phone numbers on file in the Registrar's Office and promptly report any address/phone number changes to that office or Dexter Hanley College (DHC students);
* it is understood that this policy does not bind the University to offer the students' curricula or major programs which may have been discontinued or substantially altered during their leave of absence.

TRANSFERRING CREDITS FROM OTHER INSTITUTIONS

A matriculating student ***in good academic and disciplinary standing*** at The University of Scranton can transfer in no more than ten (10) percent of the total credits in the student's program. A student transferring in from another institution will be limited to no more than ten (10) percent of the total credits remaining in the student's program. All students must meet the residency requirements which state that 63 credits including the last 30 credits must be taken at The University of Scranton. University of Scranton students who have completed their sophomore year (60 credits) are permitted to take courses only at other four-year regionally accredited institutions. Those who have not completed their sophomore year may be approved for courses at two-year or four-year regionally accredited institutions. Grades below C received elsewhere are not transferable to the University; no grades from other institutions are computed into the student's grade point average. Permission to take courses at another institution is granted by the dean of the student's college. ***Students may not ordinarily take a course at another institution if they have failed the same course at The University of Scranton.*** Students must obtain permission before registering at another institution. Exceptions to this policy can be made by the student's dean.

MILITARY LEAVE POLICY

If a student is called or volunteers for active military duty while attending The University of Scranton, the University will do its best to protect the academic and financial interest of the student within the norms of good academic judgment. The student must meet with the dean of his/her college and provide proof that he/she has been called into active duty. The dean, after conferring with the Director of Financial Aid, the Treasurer, the student's current faculty, and the student will decide the course of action. The dean will then process the necessary paperwork and place the student on military leave status. If the student does not concur with the dean's decision, the student may appeal to the provost/vice president for academic affairs.

The student is responsible for all room and board and related expenses incurred.

In all cases, if the student does not return from active duty or is unable to return to school for medical reasons, any tuition and fees for the term in which the student was called to duty, paid by the student and credited to the student's account, will be refunded to the family.

WALKER POLICY

Undergraduates who are within 6 academic credits of fulfilling all gaduation requiremens may seed the opportunity to participate in the commencement ceremony. These students must be in good academic and disciplinary standing. They must provide a plan to complete their remaining credits at The University of Scranton during the summer or fall sessions. The plan must be approved by the dean of the college. Students may not participate in a second commencement upon completion of all degree requirements.

GENERAL REGULATIONS

Ordinarily, all entering students – both freshmen and transfer students – are held to the requirements in the catalog of the year in which they enter.

The University reserves the right to change any of the rules and regulations in this catalog. All such changes are effective at such times as the proper authorities determine and may apply not only to prospective students but also to those who are already matriculated in the University. However, curricular changes shall not become effective until published in the catalog unless specifically approved for an earlier implementation date by the appropriate body. If a change is approved for implementation prior to its publication in a catalog, the appropriate school, department, or program shall inform students affected by the change. Application of policies, rules, and requirements, including changes thereto, may be appealed to the dean of the student's college.

The University reserves the right to take appropriate disciplinary action in the case of any student who conducts himself or herself contrary to the standards of the University. These standards (particularly in the area of academic integrity) are given clear expression in the University's Academic Code of Honesty published in the faculty and student handbooks of the University. The University also reserves the right to modify admissions requirements, the right to change tuition and fees charges, and the right to change the semester schedule of courses.

STUDENT RIGHTS AND CONFIDENTIALITY OF INFORMATION

The University of Scranton recognizes the privacy rights of individuals who are or who have been students, as guaranteed by the Family Educational Rights and Privacy Act (FERPA) of 1974. No information from records, files, or other data directly related to a student shall be disclosed to individuals or agencies outside the University without the express written consent of the student. FERPA does authorize disclosure without consent to school officials with legitimate educational interests who need to review an education record in order to fulfill their professional responsibilities. The following people or agencies are also allowed access to records without consent: persons or companies with whom the University has contracted (such as attorneys, auditors, or collection agents); students serving on official committees, such as disciplinary or grievance committees, or assisting school officials in performing their tasks; persons or organizations to whom students have applied for financial aid; persons in compliance with a lawful subpoena or court order; and persons in an emergency in order to protect the health or safety of students or other persons.

The University considers the following to be public information that may be made available, at its discretion, without prior consent of the student:

-Name
-Former Name(s)
-Address (local and permanent)
-Telephone Number (campus/local and permanent)
-Date and Place of Birth
-Photograph
-Major Field of Study
- Participation in Officially Recognized Activities and Sports
-E-mail Address
-Dates of Attendance
-Enrollment Status
-Campus Employment
-Class Level
-Expected/Actual Date of Graduation
-Degrees, Awards, Academic Honors
-Weight and Height of Members of Athletic Team

A student who wishes to prevent the public disclosure of any or all the above information may request so by notifying the Office of Student Affairs, the Dexter Hanley College Office, the Registrar's Office, or the Graduate School Office, where he/she may obtain the form prohibiting disclosure. A directory of names, addresses, and telephone numbers of students is published by the University at the beginning of the fall semester. Students who do not wish to be listed in the campus directory must notify the University by the end of the first week of classes in the fall semester.

Except where prescribed by law, information regarding a student's education record may not be disclosed to a parent, guardian or spouse without the student's written authorization on file in the Office of the Registrar, Dexter Hanley Office, or Graduate School Office.

FERPA affords students the right to inspect and review their educational records within 45 days of the day the University receives such requests. Students should submit to the Registrar or other appropriate official written requests that identify the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected.

Students have the right to request the amendment of any educational records that they believe are inaccurate or misleading. They should write to the University official responsible for the record, clearly identify the part of the record that they want changed, and specify why it is inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to appeal the decision. Additional information regarding the appeal will be provided to the student when notified.

For more information regarding FERPA, please contact the Office of the Registrar in St. Thomas Hall, 301. Students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by The University of Scranton to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-4605

THE UNIVERSITY OF SCRANTON GENERAL EDUCATION

All students at The University of Scranton have the opportunity to become liberally educated in the Ignatian tradition. This liberal education will include the development of general skills and skills in the major. It will also include opportunity to develop both depth and breadth in the major, the cognate, and in the areas of natural science, social/behavioral science, humanities, philosophy, and theology. Within the disciplines listed above, students will also take at least two courses that are writing-intensive and two courses with a strong cultural diversity component. The University's approach to general education follows the outline below.

FIRST YEAR

Development of skills and knowledge in writing, speaking, quantitative reasoning, computing and information retrieval and use.

SPEECH	COMM 100[1]
WRITING	WRTG 107 or PHIL 217J[1] or WRTG 105 and 106
COMPUTER LITERACY	C/IL 102 or 104
QUANTITATIVE REASONING	A mathematically-based course as recommended by the major or chosen by the student in consultation with an advisor: the titles of courses meeting this requirement are preceded by a (Q)
FRESHMAN SEMINAR	Freshman seminar INTD 100

[1] Because of its recognition that utilizing information technology, writing, and speaking effectively are skills necessary for success in college and in one's later professional life, The University of Scranton requires that students demonstrate basic competencies in written, oral, and digital communication before their junior year. These competencies may be demonstrated by the students in one of the following ways:

a. An examination supervised by Communication Department faculty (for COMM 100), by English Department faculty (for WRTG 107) and by the Computer Information Literacy Advisory Board (for C/IL 10x and 10xL). These examinations may be taken only once by freshmen and sophomores who have not taken the course in the same skill area.

b. Successful completion (a grade of C or higher) of each course set up to facilitate mastery of these skills: Communication 100 for oral communication; Writing 107 (or appropriate advanced standing course) for writing skills; and each component of Computer/Information Literacy 102 and 102L (or 104/104L) for ability to use digital technology.

FIRST AND SECOND YEAR

PHILOSOPHY	PHIL 120 - PHIL 210
THEOLOGY/REL. STUDY	T/RS 121 - T/RS 122
HUMANITIES	Humanities courses as recommended by the student's home department or student's advisor. Students must earn six credits in one humanities field: history, literature, or foreign language. Students will then earn six more credits in any other humanities fields with no more than three credits in art or music. Courses that fulfill the Humanities requirement are listed in several subdivisions under "culture"; the titles of courses meeting this requirement are preceded by (CH), (CL), (CF), or (CA).
NATURAL SCIENCE	Six credits of natural science as determined either by the major or by the student after consultation with an advisor. Courses focus on the historical and cultural context of science, providing students

with the tools to analyze and discuss scientific and technological issues and relate quantitative information to scientific theory and models within a particular scientific discipline. Courses that meet the requirements of natural science have an (E) before the title.

SOCIAL/ BEHAVORIAL SCIENCE — Six credits of social/behavioral science as determined either by the student's major or by the student after consultation with an advisor. Courses that fulfill this requirement have an (S) preceding their titles.

PHYSICAL EDUCATION — Physical education courses as chosen by the student. The total number of PHED credits to be completed is three.

SECOND AND THIRD YEAR

ELECTIVES — Students should begin the 12 credits of free electives that are required. It is recommended that students consider using these credits to develop either a minor or a second major.

PHILOSOPHY or THEOLOGY — Students must take one more course chosen from either Philosophy or Theology/Religious Studies. Courses that meet this requirement have a (P) preceding the title.

Most students will not have had the opportunity to complete all of the GE requirements listed under FIRST AND SECOND YEAR and, therefore, will attend to these requirements in the THIRD and even the FOURTH years. Students are advised to have fulfilled some of their cultural-diversity and writing-intensive course requirements during this time.*

FOURTH YEAR

Finish GE requirements that have not been completed by the end of the THIRD year, including the writing-intensive and cultural-diversity requirements.[2]

Subject	Credits	Courses
Freshman Seminar	1	INTD 100
Physical Education	3	See approved PHED Activity courses
Writing	3 or 6	*WRTG 107 or (WRTG 105 and 106 for ADP only)
Public Speaking	3	*COMM 100
Computing Information Literacy	3	*C/IL 102 and 102L or 104 and 104L
Quantitative Reasoning	3 to 4	See approved courses (Q)
Theology/Philosophy	15	T/RS 121 and 122, PHIL 120 and 210 and approved T/RS or PHIL Elective (P)
Natural Science	6 to 8	See approved courses (E)
Humanities	12 Total	Six credits in one area: History (CH),
History	0-6	Literature (CL), or Foreign Language (CF).
Literature	0-6	Six additional credits from any of the re-
Foreign Language	0-6	maining humanities areas, but no more than
Art/Music/Theater	0-3	three from Art/Music/Theatre area (CA).
Social/Behavioral Science	6	See approved courses (S)
Writing Intensive	3-6	**Two courses (W)
Cultural Diversity	6	**Two courses (D)
Electives	12	Any subject except PHED activity classes
Total Credits	77-85 based upon major and credit value of courses selected	

* Requirement may be satisfied by exemption exam.

** Note: Writing-intensive and cultural-diversity courses may also satisfy other requirements in the general-education curriculum reducing the total number of credits required. One writing-intensive course should be in the major.

Curriculum 2000

General Education Requirements and Approved Courses

In the course listings, a course title preceded by a letter code in parenthesis indicates a course that satisfies a general-education requirement in the curriculum. All courses listed here may not be offered during the current registration cycle.

The letter codes are: (Q) Quantitative Reasoning, (CH) Humanities/Culture: History, (CL) Humanities/Culture: Literature, (CF) Humanities/Culture: Foreign Languages, (CA) Humanities/Culture: Arts, (E) Natural Science, (S) Social/Behavioral Science, (P) Philosophy or Theology/Religious Studies, (W) Writing-Intensive, (D) Cultural-Diversity. Some courses may have more than one letter code indicating that the course satisfies multiple requirements, e.g. (CH,W) satisfies both a Humanities/Culture: History and a Writing-Intensive requirement.

SKILLS ACQUISITION

Public Speaking – 1 course 3 credits

COMM	100	Public Speaking
PHIL	217J	The Trivium

Writing – 1 course 3 credits

WRTG	107	Composition (or WRTG 105 and 106: College Writing I and II)

Quantitative Reasoning – 1 course 3 credits (Q)

EDUC	120	Applied Statistics
INTD	224	Science, Decision Making and Uncertainty
MATH	101	Mathematics Discovery I
MATH	102	Fundamentals of Numerical Statistics
MATH	103	Pre-Calculus Mathematics
MATH	104	Mathematics for Elementary Teachers
MATH	105	Fundamentals of Geometric Mathematics
MATH	106	Quantitative Methods I
MATH	107	Quantitative Methods II
MATH	109	Quantitative Methods in the Behavioral Sciences
MATH	114	Analysis I
MATH	142	Discrete Structures
MATH	201	Algebra and Environmental Issues
MATH	204	Special Topics of Statistics
PS	240	Political Science Statistics
PSYC	210	Psychological Statistics
S/CJ	215	Statistics for Social Science
STAT	251	Statistics for Business I
STAT	252	Statistics for Business II

Computing/Information Literacy – 1 course and lab 3 credits

C/IL 102/102L Computing and Information Literacy/Lab

C/IL courses present computing as a tool that amplifies intellectual ability. Students learn to make full use of digital technology in the problem-solving process to obtain, evaluate, and disseminate information. Laboratory exercises introduce students to the use of relevant software tools, and this use is reinforced and broadened through lecture assignments. Furthermore, students gain a conceptual understanding of how computer systems work and an appreciation of the impact of this technology on society. Students completing any C/IL course will be adequately prepared to make use of computing and information resources but are encouraged to take the variant most appropriate for their major since each variant presents its own emphasis and specialized laboratory activities. 2 hours lecture and 2 hours laboratory. Lecture and lab must be taken concurrently. Prior to the mid-semester grade, withdrawal from one requires withdrawal from both. Students must pass both lecture and laboratory to receive credit for either. Students who earn credit for any C/IL course may not earn credit for another C/IL course, or CMPS 102 or 104.

C/IL 104 Computing and Information Literacy for Business
This course is a focused variant of C/IL 102/102L with an emphasis appropriate for students with majors in the School of Management.

GE Designations for courses listed in the 2002-2003 catalog

Writing-Intensive – 2 courses (W)
[no additional credits]

ARTH	114	History of Architecture
ARTH	116	Art of Greece and Rome
ARTH	117	Early Christian and Byzantine Art
ARTH	118	Medieval Art: Romanesque and Gothic
ARTH	216	Michelangelo and his World
ARTH	217	Leonardo (DaVinci)
ARTH	218	The Age of Rembrandt
BIOL	349L	Plant Physiology
BIOL	350L	Cellular Biology Lab
BIOL	362L	Molecular Biology II Lab
BIOL	370L	Animal Behavior Lab.
BLDR	484	Management by Subjectives, Leadership in Lit
CHEM	362L	Physical Chemistry Lab I
CHEM	363L	Physical Chemistry Lab II
CHEM	450L	Biochemistry Lab
CHEM	493-494	Undergraduate Research
CMPS	330	Info Systems Analysis
CMPS	374	Fundamentals of Software Engineering
CMPS	490	Computer Projects
COMM	210	Logical & Rhetorical Analysis
COMM	224	Newswriting
COMM	324	Advanced Newswriting
EDUC	120	Applied Statistics
ENLT	212	Masters of Darkness
ENLT	213	Introduction to Satire
ENLT	221	Woody Allen
ENLT	222	Graham Greene's Travelers
ENLT	225	Writing Women
ENLT	227	Frankenstein's Forebears
ENLT	228	Race in Anglo-American Culture 1600-1860
ENLT	234	Camelot Legend
ENLT	235	Literature in the Age of Chaucer
ENLT	236	The Romantic Protest
ENLT	237	The Darker Romantics
ENLT	239	Irish Short Story
ENLT	341	Shakespeare: Special Topics
ENLT	345	Restoration & 18th Century Drama
ENLT	348	Colonial and Post-Colonial Fiction
ENLT	352	The Development of the American Novel
EXSC	412	Special Topics in Exercise Science & Sports Medicine
FREN	312	French Composition
FREN	321	Advanced French Stylistics I
FREN	322	Advanced French Stylistics II
FREN	431	Twentieth-Century French Novel
GERM	311	Composition I
GERM	312	Composition II
GERM	321	Advanced Stylistics I
GERM	322	Advanced Stylistics II
GRK	213	Greek Literature and Mythology in Translation
HADM	293	Research in Health Administration
HIST	140	The Historian's Craft
HIST	315	American Progressivism, War & Reaction
HIST	322	America in the Gilded Age, 1865-1900
HIST	340	History of Urban America
HIST	490	Seminar in European History
HIST	491	Seminar in American History
HRS	251	Performance Appraisal
HRS	252	Workforce Education and Training
HS	293	Research Methods in Human Services
HS	337	Counseling Women & Girls
HUM	286H	Victorian Studies
INTD	201C	Christian Classics I
INTD	202C	Christian Classics II
INTD	224	Science, Decision and Uncertainty
IS	390	Seminar in International Studies
ITAL	207	Italian Women's Writing in Translation
ITAL	208	Envisioning Italy from Novel to Film
LAT	213	Classical Roman Literature and Mythology

LIT	205	Modern Latin American Literature
LIT	207	Literature of American Minorities
LIT	384	Special Topics in Minority Education
MATH	201	Algebra and Environmental Issues
MATH	325	History and Philosophy of Mathematics
NURS	140	Introduction to Nursing Concepts
NURS	213	Child and Adolescent Health
NURS	241	Perspectives in Professional Nursing
NURS	405	Health Writing for Publication
NURS	493	Nursing Research
OT	493L	Research Methods Lab
PHIL	240	Logic and Written Discourse
PHIL	314	Philosophy and the City
PHIL	316	American Perspectives in Medical Ethics
PHYS	108	New York Times Physics
PHYS	270L	Modern Physics Lab
PS	240	Political Science Statistics
PS	318	U.S. Foreign Policy: Cold War
PS	319	U.S. Foreign Policy Process
PS	331	The European Union
PSYC	330L	Research Methods Lab
PSYC	335	Psychological Testing
PSYC	360	Clinical Psychology
PSYC	491	History and Literature of Psychology II
PT	440	Organization & Management in PT
PT	477	Teaching in Physical Therapy
SOC	210	Marriage and the Family
SOC	217	Family Issues & Social Policy
S/CJ	224	Sociology of Deviance
SPAN	312	Composition
SPAN	314	Culture & Civilization of Latin America
SPAN	321	Advanced Stylistics
T/RS	184C	Inside the Catholic Tradition
T/RS	208	Faith and Justice
T/RS	210	The History of Christian Theology
T/RS	223	Heaven and Hell
T/RS	233	Suffering
T/RS	236	Prophets and Profits: The Economy in Christian Life
T/RS	316	God and the Earth
T/RS	326	The Church and Contemporary Social Issues
T/RS	333	The Jewish Way of Life
T/RS	335	Judaism in the Time of Jesus
T/RS	337	Jewish Approaches to Ethics
T/RS	439	Psychology and Spirituality

Note: Students must take two courses designated as writing-intensive (W). One of the writing-intensive courses should be in the major. Writing-intensive courses may also fulfill other requirements in the general-education curriculum where indicated.

SUBJECT MATTER MASTERY

The Human Person and God

Theology/Religious Studies – 2 courses 6 credits

T/RS	121	Theology I
T/RS	122	Theology II

Philosophy —2 courses 6 credits

PHIL	120	Intro to Philosophy
PHIL	210	Ethics

Theology/Philosophy Elective — 1 course 3 credits (P)

ED/P	306	Philosophy of Education
INTD	201C	Christian Classics I
INTD	202C	Christian Classics II

All PHIL courses listed in this catalog are approved except for: 120, 210, 219, 232, 321, 327, and 425

T/RS	184C	Inside the Catholic Tradition
T/RS	204	The Epistles of St. Paul
T/RS	207	Jews, Christians, and the Bible
T/RS	208	Faith & Justice I
T/RS	210	The History of Christian Theology
T/RS	215	Early Christian Writers
T/RS	217	The Holocaust in Context
T/RS	218	Development of Christian Thought to 1100
T/RS	219	Development of Christian Thought 1100-1800
T/RS	220	Spirituality: Liturgy and Sacraments
T/RS	222	Intro Liturgical Theology
T/RS	223	Heaven and Hell
T/RS	224	Theology of the Person
T/RS	226	Introduction to Eastern Liturgies
T/RS	227	Christ in Tradition and Culture
T/RS	231	Social Ethics
T/RS	233	Suffering
T/RS	234	20th Century Peacemakers
T/RS	235	Theology of Birth and Death
T/RS	236	Prophets and Profits: The Economy in Christian Life
T/RS	240	Theology of Marriage
T/RS	296	Life Along the Dead Sea
T/RS	305	The Apocalypse of St. John
T/RS	308	The Great Prophets
T/RS	309	The Heart of the Old Testament
T/RS	310	Religion and the American People
T/RS	313	Faith and Healing: God and Contemporary Medicine
T/RS	314	Religions of the World
T/RS	315	Women in Christianity
T/RS	316	God and the Earth
T/RS	319	Women's Spiritual/ Autobiographical Writings
T/RS	321	Friendship and Christian Life
T/RS	322	Approaches to God
T/RS	323	Signs and Symbols
T/RS	326	The Church and Contemporary Social Issues
T/RS	328	Wealth and Poverty in Biblical Tradition
T/RS	330	Biomedical Ethics
T/RS	331	Christian Ethics
T/RS	333	The Jewish Way of Life
T/RS	334	Jewish and Christian Approaches to Ethics
T/RS	335	Judaism in the Time of Jesus
T/RS	336	Contemporary Case Studies in Theology
T/RS	337	Jewish Approaches to Ethics
T/RS	339	An Exploration of Catholic Identity
T/RS	439	Psychology and Spirituality

Nature

Natural Science – 2 courses 6-8 credits (E)

BIOL	100	Modern Concepts of Biology
BIOL	101	General Biological Science
BIOL	105	Biodiversity
BIOL	108	History of Life on Earth
BIOL	110	Structure and Function of the Human Body
BIOL	111	Structure and Function of the Human Body
BIOL	141	General Biology
BIOL	142	General Biology
BIOL	195	Tropical Biology
BIOL	201	Anatomy/Physiology
BIOL	202	The ABC's of Genetics
CHEM	100	Elements of Chemistry
CHEM	104	Science and Society
CHEM	110	Introductory Chemistry I
CHEM	111	Introductory Chemistry II
CHEM	112	General Chemistry I
CHEM	113	General Chemistry II
CHEM	202	Global Change
CHEM	232	Organic Chemistry I
CHEM	233	Organic Chemistry II
INTD	211	HIV/AIDS Issues
NSCI	103	The Ascent of Man
NSCI	201	Science and the Human Environment

NSCI	286H	Elements of Natural Science	PHYS	108	New York Times Physics
PHYS	100	History of Science and Technology	PHYS	109	The Conscious Universe
PHYS	101	The Solar System	PHYS	113	Science of Light and Photography
PHYS	102	Earth Science	PHYS	120	General Physics I
PHYS	103	Seeing the Light	PHYS	121	General Physics II
PHYS	104	Intro to Consumer Technology	PHYS	140	Elements of Physics I
PHYS	105	Man and the Evolutionary Universe	PHYS	141	Elements of Physics II
PHYS	106	Energy and the Environment	PHYS	201	Stellar Evolution
PHYS	107	"Hands on" Physics	PSYC	105	Brain and Human Nature
			PSYC	106	Drugs and Behavior
			PSYC	231	Behavioral Neuroscience

Culture

Humanities – 4 courses (from at least 2 areas) *12 credits (C)*

History — 2 courses (CH)

HIST	110	History of the United States I	HIST	232	England, 1485 to 1714
HIST	111	History of the United States II	HIST	233	England, 1714 to the Present
HIST	120	Europe, 1500 to 1815	HIST	238	History of American Women I
HIST	121	Europe, 1815 to the Present	HIST	239	History of American Women II
HIST	125	Latin American History I	HIST	295	Britain: Past and Present
HIST	126	Latin American History II	HIST	316	From Depression to Cold War: 1929-1960
HIST	213	Gender & Family in Latin America	HIST	327	The African Experience in Latin America, 1590-1900
HIST	214	World Politics	HIST	321	American Ideas & Culture I
HIST	215	Church & Society in Latin America	HIST	322	American Ideas & Culture II
HIST	216	Race in American History	HIST	331	Recent U.S. History: 1960 to the Present
HIST	217	History of American Catholicism			
HIST	219	Modern World History			
HIST	220	War and Modern Society			
HIST	221	The American West			
HIST	224	Ethnic and Racial Minorities in NE PA			

Literature — 2 courses (CL)

ENLT	120	Introduction to Fiction	ENLT	225	Writing Women
ENLT	121	Introduction to Poetry	ENLT	226	Novels by Women
ENLT	122	Introduction to Drama	ENLT	227	Frankenstein's Forebears
ENLT	125	Classic American Stories	ENLT	228	Race in Anglo-American Culture 1600-1860
ENLT	126	Introduction to Irish Culture	ENLT	229	The Cross-Cultural Novella
ENLT	127	Myth of the Hero	ENLT	230	American Romanticism
ENLT	140	English Inquiry	ENLT	234	The Camelot Legend
ENLT	210	Modern Poetry	ENLT	235	Literature in the Age of Chaucer
ENLT	211	Dramatic Comedy	ENLT	236	The Romantic Protest
ENLT	212	Masters of Darkness	ENLT	237	The Darker Romantics
ENLT	213	Introduction to Satire	ENLT	238	British Romantic Poets
ENLT	215	Literature of the Absurd			
ENLT	220	Shakespeare			
ENLT	222	Graham Greene's Travelers			

ENLT	239	Irish Short Story
ENLT	295	Shakespeare in Stratford
ENLT	341	Shakespeare: Special Topics
ENLT	345	Restoration and 18th Century Drama
ENLT	348	Colonial and Post-Colonial Fiction
ENLT	352	The Development of the American Novel
FREN	239	French Christian Thinkers
FREN	313	Survey of French Literature I
FREN	314	Survey of French Literature II
FREN	320	Introduction to French Literature
GERM	313-314	Survey of German Lit. and Culture
GRK	213	Greek Literature and Mythology in Translation
HUM	286H	Victorian Studies
HUM	311J	Masterworks I
HUM	312J	Masterworks II
ITAL	207	Italian Women's Writing in Translation
ITAL	313	Survey of Italian Lit I
ITAL	314	Survey of Italian Lit II
LAT	213	Classic Roman Literature and Mythology
LIT	105	Intro to World Literature in Translation
LIT	205	Modern Latin American Literature
LIT	207	Literature of American Minorities
LIT	208	French Masterpieces in English Translation
LIT	209	Masterworks of Russian and Slavic Lit. in English Translation
LIT	384	Special Topics in American Minority Literature
SPAN	203	Latin American Cultural Heritage
SPAN	296	Culture, Civilization and Lit of Latin America
SPAN	320	Introduction to Literature
SPAN	330	History of Spanish Literature
SPAN	331	Survey of Spanish American Literature
THTR	110	Introduction to Theatre
THTR	211	Theatre History I
THTR	212	Theatre History II

Foreign Languages — 2 courses (CF)

FREN	101	Elementary French I
FREN	102	Elementary French II
FREN	211	Intermediate French I
FREN	212	Intermediate French II
FREN	311	Advanced French Conversation and Composition I
FREN	312	Advanced French Conversation and Composition II
GERM	101	Elementary German I
GERM	102	Elementary German II
GERM	211	Intermediate German I
GERM	212	Intermediate German II
GERM	311	Advanced German Conversation and Composition I
GERM	312	Advanced German Conversation and Composition II
GRK	111	Elementary Greek I
GRK	112	Elementary Greek II
GRK	113	Introduction to New Testament Greek I
GRK	114	Introduction to New Testament Greek II
HEBR	101-102	Introduction to Biblical Hebrew
ITAL	101	Elementary Italian I
ITAL	102	Elementary Italian II
ITAL	211	Intermediate Italian I
ITAL	212	Intermediate Italian II
ITAL	311	Advanced Italian Conversation and Composition I
ITAL	312	Advanced Italian Conversation and Composition II
JAP	101	Elementary Japanese I
JAP	102	Elementary Japanese II
LAT	111	Elementary Latin I
LAT	112	Elementary Latin II
LAT	211	Intermediate Latin I
LAT	212	Intermediate Latin II
PORT	110	Intensive Elementary Portuguese
PORT	210	Intensive Intermediate Portuguese
RUSS	101	Elementary Russian I
RUSS	102	Elementary Russian II
SPAN	101	Elementary Spanish I
SPAN	102	Elementary Spanish II

SPAN	211	Intermediate Spanish I	SPAN	311	Advanced Spanish Conversation and Composition I
SPAN	212	Intermediate Spanish II			
SPAN	295	Contemp. Mexican Culture and Language	SPAN	312	Advanced Spanish Conversation and Composition II

Art History/Music History/Theatre — 1 course maximum (CA)

ARMU	140	Perceiving the Arts I	ARTH	213	American Art
ARMU	141	Perceiving the Arts II	ARTH	214	Renaissance Art and Architecture
ARTH	111	History of World Art I			
ARTH	112	History of World Art II	ARTH	216	Michelangelo and His World
ARTH	113	Topics in Non-Western Art	MUS	111	Music History I
ARTH	114	History of Architecture	MUS	112	Music History II
ARTH	116	Art of Greece and Rome	THTR	111	Introduction to Acting
ARTH	210	Topics on Women in the Visual Arts	THTR	120	Theatre for Youth and Creative Drama
			THTR	213	Design for the Theatre

INTEGRATION OF INDIVIDUAL AND COMMUNITY

Personal

Freshman Experience — 1 course 1 credit

INTD	100	Freshman Seminar

Physical Education — 3 or more courses 3 credits

PHED	101	Weight Training	PHED	120	Running
PHED	103	Tennis	PHED	121	Lifeguard Training
PHED	104	Self Defense for Women	PHED	122	Water Safety Instructor
			PHED	126	Skiing
PHED	105	Cardio Fitness	PHED	129	Latin, Swing & Ballroom Dancing
PHED	106	Aerobic Fitness			
PHED	107	Basketball	PHED	130	Varsity Sports
PHED	108	Bowling	PHED	134	Kodokan Judo
PHED	109	Yoga	PHED	136	Wellness for the Young Adult
PHED	110	Intermediate Swimming	PHED	138	Physical Fitness Training
PHED	111	Scuba Diving			
PHED	112	CPR and First Aid for the Professional	PHED	139	Tai Chi Chuan
			PHED	141	Soccer
PHED	114	Racquetball	PHED	142	Wrestling
PHED	116	Conditioning for Competition	PHED	145	Fitness Swimming
			PHED	146	Golf
PHED	117	Volleyball	PHED	147	Badminton
PHED	118	Karate	PHED	160	Intro to Coaching
PHED	119	Modern Jazz Dance			

Social

Cultural Diversity — 2 courses no additional credits (D)

ARTH	113	Topics in Non-Western Art	COMM	229	Gender and Communication
ARTH	210	Topics on Women in the Visual Arts	ECO	351	Environment of International Business
BLDR	484	Management by Subjectives: Leadership in Lit	EDUC	131	Experiencing Cultural Diversity through Children's Lit
COMM	228	Intercultural Communication			

EDUC	140	Early Childhood Education
EDUC	346	Social Studies Methods
EDUC	364	Inclusionary Classroom Practices
ENLT	126	Introduction to Irish Culture
ENLT	222	Graham Greene's Travelers
ENLT	225	Writing Women
ENLT	226	Novels by Women
ENLT	227	Frankenstein's Forebears
ENLT	228	Race in Anglo-American Culture, 1600-1860
ENLT	229	The Cross-Cultural Novella
ENLT	239	The Irish Short Story
ENLT	348	Colonial and Post-Colonial Fiction
ENLT	360	Introduction to Jewish Literature
EXSC	435	Women in Sport
FREN	212	Intermediate French II
FREN	239	French Christian Thinkers
FREN	311	French Conversation
FREN	313	Survey French Literature
FREN	314	Survey French Literature
FREN	315-316	Survey of French Culture & Civilization I & II
FREN	321-322	Advanced French Stylistics I & II
FREN	431	Twentieth-Century French Novel
GEOG	217	Cultural Geography
GERM	211	Intermediate German I
GERM	212	Intermediate German II
GERM	295	German Culture and Heritage
GERM	313-314	Survey of German Lit and Culture (can only count for 3 credits)
GRK	205	Legacy of Greece and Rome
GRK	213	Greek Literature and Mythology
GRK	295	Classic and Contemporary Greek Culture
HADM	315	Cultural Diversity and Health Administration
HIST	125-126	Latin American History
HIST	212	Rebels, Rogues, and Reformers
HIST	213	Gender and Family in Latin America
HIST	214	World Politics
HIST	215	Church & Society in Latin America
HIST	216	Race in American History
HIST	219	Modern World History
HIST	221	The American West
HIST	224	Ethnic and Racial Minorities in NE PA
HIST	227	The Civilization of Islam
HIST	238	History of American Women I
HIST	239	History of American Women II
HIST	240	History of Modern Italy
HIST	296	Italian History & Heritage
HIST	327	The African Experience in Latin America, 1500-1900
HRS	351	Recruitment, Selection & Staffing
HS	241	Case Management and Interviewing
HS	333	Multiculturalism in Human Services
HS	337	Counseling Girls and Women
HUM	295	Holy Land Cultural Tour
HUM	311J	Masterworks I
HUM	312J	Masterworks II
INTD	103	The Vietnam Experience
INTD	209	The Holocaust
INTD	211	HIV/AIDS
ITAL	207	Italian Women's Writing in Translation
ITAL	208	Envisioning Italy from Novel to Film: The Case of Neorealism
ITAL	212	Intermediate Italian II
ITAL	295	Italian Culture and Society
ITAL	311-312	Conversation/ Composition
LAT	213	Latin Literature and Mythology
LIT	105	Intro to World Literature in Translation
LIT	205	Modern Latin American Literature
LIT	207	Literature of American Minorities
LIT	208	French Masterpieces in English Translation

LIT	209	Masterworks of Russian and Slavic Literature in English Translation
LIT	384	Special Topics in American Minority Literature
MGT	474	Managing a Multicultural Workforce
MKT	475	International Marketing
NURS	111	Women's Health
NURS	310	Cultural Diversity in Health and Illness
NURS	312	Nursing the Older Adult
OT	461	Geriatrics
PHIL	218	Feminism: Theory and Practice
PHIL	225	Asian Philosophy
PHIL	226	Chinese Philosophy
PHIL	229	Philosophy of Religion
PHIL	314	Philosophy and the City
PHIL	326	Advanced Topics in Feminist Philosophy
PHIL	340	Philosophy and Judaism/20th Century
PHIL	414	The Philosophy of Emmanuel Levinas
PHIL	419J	Philosophy East and West
PORT	210	Intermediate Portuguese
PS	213	Modern Africa
PS	216	Women's Rights and Status
PS	220	Ideologies
PS	227	Women, Authority and Power
PS	295	Contemporary Mexican Culture and Language
PS	313	Classical Political Ideas
PS	314	Modern Political Ideas
PS	328	Modern China
PS	332	Modern Japan
PSYC	237	Psychology of Women
PT	465	Psychosocial Aspects of Disability
SOC	210	Marriage and the Family
SOC	215	Feminism and Social Change
SOC	217	Family Issues & Social Policy
SOC	224	American Minority Groups
SOC	232	Great American Cities
SOC	234	Cultural Anthropology
SOC	235	Peoples of East Asia
S/CJ	226	Comparative Justice Systems
SPAN	203	Latin American Cultural Heritage
SPAN	212	Intermediate Spanish II
SPAN	295	Contemp. Mexican Culture and Language
SPAN	296	Culture, Civilization and Lit of Latin America
SPAN	311	Conversation
SPAN	314	Culture and Civilization of Latin America
SPAN	331	Survey of Spanish American Literature
T/RS	207	Jews, Christians and the Bible
T/RS	217	The Holocaust in Context: History and Theology
T/RS	234	20th Century Peacemakers
T/RS	296	Life Along the Dead Sea
T/RS	314	Religions of the World
T/RS	315	Women in Christianity
T/RS	319	Women's Spiritual and Autobiographical Writings
T/RS	326	The Church and Contemporary Social Issues
T/RS	333	The Jewish Way of Life
T/RS	335	Judaism in the Time of Jesus
T/RS	337	Ethics: The Jewish Tradition
T/RS	439	Spirituality and Psychology
WRTG	106	College Writing II

Note: Students must take two courses designated as Cultural Diversity (D). Cultural Diversity courses may also fulfill other general education requirements in the general education curriculum where indicated. Occasionally, departments may offer special topics courses which fulfill cultural diversity requirements.

Social Behavioral Science — 2 courses 6 credits (S)

CJ	110	Criminal Justice
ECO	101	Current Economic Issues
ECO	102	Economic Processes and Perspectives
ECO	103	Economics of Environmental Issues
ECO	153	Prin. of Microeconomics
ECO	154	Prin. of Macroeconomics
ECO	200	Economic Sec. and Personal Finance
GEOG	134	World Regional Geography
GEOG	217	Cultural Geography
GERO	110	Intro. to Gerontology
HRS	111	Macro Human Resources
HS	111	Intro to Human Adjustment
PS	130-131	Intro to National Government I & II
PS	135	State and Local Government
PS	220	Ideologies
PS	230	Environmental Policy
PS	295	Contemp. Mexican Culture and Language
PSYC	110	Fundamentals of Psychology
PSYC	220	Social Psychology
PSYC	221	Childhood and Adolescence
PSYC	222	Adulthood and Aging
PSYC	224	Personality
PSYC	225	Abnormal Psychology
PSYC	234	Cognitive Psychology
PSYC	237	Psychology of Women
S/CJ	210	Law and Society
S/CJ	213	Criminology
S/CJ	214	Juvenile Delinquency
S/CJ	218	The American Court System
S/CJ	224	Sociology of Deviance
S/CJ	226	Comparative Justice Systems
SOC	110	Intro to Sociology
SOC	112	Social Problems
SOC	224	American Minority Groups
SOC	234	Cultural Anthropology

Electives — 4 courses 12 credits

Note: Students are encouraged to use their General-Education electives to add minors or second majors where possible. For some majors, specific courses have been recommended in the GE elective area by the home departments. Where no specific recommendations have been made by the home department, any course (other than PHED activity courses) may be used as a free elective.

Please refer to the department course listings in the catalog for complete course descriptions. If you have a question about how a specific course satisfies a requirement, please contact your advisor, advising center, dean's office or registrar's office.

OPTIONS FOR UNDECLARED FRESHMEN

Students who are not yet ready to declare a major have the option of selecting one of three general areas of study – CAS Common Curriculum, KSOM Business Area, and CPS Common Curriculum – with the particular major to be determined by the end of the freshman year.

CAS COMMON CURRICULUM

Undecided students who are interested in exploring one of the majors offered in the College of Arts and Sciences may enroll in the CAS Common Curriculum program. Students in this program take a combination of freshman-level General Education classes and courses in potential majors. Specific courses are chosen in consultation with an academic advisor. In addition, CAS Common Curriculum students take a Freshman Seminar designed to help them make informed decisions about their majors. All CAS Common Curriculum students should take at least two potential major courses each semester of their Freshman year. The chart below outlines a recommended curriculum for the first year.

	FIRST YEAR	FALL	SPRING
GE Basic Skills	Public Speaking/Composition/ ComputerLiteracy	3 credits	3 credits
GE Phil or T/RS	Theology I or Intro to Phil	3 credits	3 credits
Potential Major Class #1	Select from introductory classes of any major	3-4.5 credits	3-4.5 credits
Potential Major Class #2	Select from introductory classes of any major	3-4.5 credits	3-4.5 credits
Potential Major Class #3*	Select from introductory classes of any major	3-4.5 credits	3-4.5 credits
GE FSEM	Freshman Seminar	1 credit	
PHED	Physical Education		1 credit
Total credits per term:		**16-18**	**16-18**

*Students who are considering a major in one of the laboratory sciences (e.g., Biology, Biochemistry, Chemistry, Physics, Biomathematics, Biophysics) might only take two potential major courses because the basic lab science courses usually involve 4-4.5 credits each.

KSOM BUSINESS COMMON CURRICULUM

	FIRST YEAR		FALL	SPRING
MAJOR (GE S/BH)	ECO 153-154	Prin. of Micro-Macro Econ.	3	3
GE WRTG-SPCH	WRTG 107 - COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 104	Computer Info. Literacy		3
GE PHIL	PHIL 120	Intro. to Philosophy	3	
GE T/RS	T/RS 121	Theology I		3
GE QUAN-ELECT	MATH	Mathematics Option-2 courses	3	3
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
Total credits per term:			**16**	**16**

CPS COMMON CURRICULUM

For students considering Health Care or Education as a major, the College of Professional Studies has a program designed to provide an exploratory freshman year for those who wish to defer declaring their choice of major. A recommended curriculum for the area studies program is outlined below.

FIRST YEAR

	FALL SEMESTER	
GE COMM 100	Public Speaking	3 credits
GE WRTG 107	Composition	3 credits
GE PHIL 120	Introduction to Philosophy	3 credits
GE BIOL 110*	Structure and Function	4 credits
GE PSYCH 110	Fundamentals of Psychology	3 credits
INTD 100	Freshman Seminar	1 credit
	Total credits per term:	**17 credits**

	SPRING SEMESTER	
Prospective Major	Elective or Core Course	3 credits
GE C/IL 102	Computer Literacy	3 credits
GE T/RS 121	Theology I	3 credits
HUMN ELECT	Humanities Elective	3 credits
HS 132	Identity Development and Career Choice	2 credits
GE BIOL 111*	Structure and Function	4 credits
	Total credits per term:	**18 credits**

*Students who have no interest in a health-science related major will substitute another course in place of biology. They will do so in consultation with the CPS Advising Center.

The College of Arts and Sciences

The College of Arts and Sciences (CAS) is the largest academic division of the University with more than 35 areas of studies. Its liberal arts programs serve students well in many different careers. CAS programs also lay the foundation for professional study in law, medicine, and dentistry, as well as for graduate study in various fields.

ART AND MUSIC

DR. MICHAEL DeMICHELE, Chairperson
DR. JOSEPHINE M. DUNN, Director, Art and Music Program

The Art and Music program offers two minors: Art History and Music History. Each discipline aims to develop a student's creative expression, to prompt aesthetic appreciation and judgment, to develop critical thinking, and to deepen understanding of the impulse to create with sound and with image.

Designated courses in Art History and Music History satisfy General Education requirements in the following areas: Humanities, Cultural Diversity, and Writing-Intensive.

MINORS IN ART HISTORY AND MUSIC HISTORY

MINOR IN ART HISTORY

A minor in Art History requires 18 credits, including ARTH 111 and 112. Four additional courses in Art History are required. Internships at the Everhart Museum are available to Art History minors upon completing 12 credits in Art History.

Students minoring in Art History have pursued graduate degrees in Art History (Ph.D.), Decorative Arts (M.F.A.), and Museum Education (M.A.). Recent graduates are employed by the Metropolitan Museum of Art (NYC), the Franklin Institute (Philadelphia), and Sotheby's (NYC).

MINOR IN MUSIC HISTORY

A minor in Music History requires 18 credits, including MUS 111, 112, 235, 236, and two additional music courses numbered 110 or above.

ART

ART 112 Staff
Color and Design 3 credits
A foundation course introducing the elements and principles of two-dimensional design. Various materials are used to explore the organization of space and basic color theory.

ART 114 Prof. Colley
Three-Dimensional Design 3 credits
A foundation course investigating basic materials and approaches in the creation of three-dimensional form. Hands-on involvement with diverse media, techniques and tools of the sculptor's craft is emphasized.

ART 116 Profs. Colley, Podhurst
Basic Drawing 3 credits
A foundation course designed to develop skills in basic drawing and perception. Various media are employed in exercises involving the use of line and shading, shape and space, and design and composition.

ART 120 Profs. Lehman, Podhurst
Painting I 3 credits
(Prerequisite: ART 112, 116 or equivalent)
A first-level painting course concerned with fundamentals such as composition, observation, basic color theory and basic techniques. The class includes one museum trip and regular group critiques.

ART HISTORY

ARMU 140-141 Dr. Dunn, Staff
(CA)Perceiving the Arts 6 credits
This two-semester course offers a cross-disciplinary introduction to art and music in a pervasive study of these art forms as they inform and are informed by the societies in which they were created. Classes include (but are not limited to) lectures, lab discussions, guest lectures, museum and concert/opera trips. Course restricted to ELED majors.

ARTH 111 Dr. Dunn, Prof. Long
(CA)History of World Art I 3 credits
A survey of the history of painting, sculpture, and architecture from prehistoric times through the dawn of the Renaissance in 1400. The art of ancient eastern and western civilizations is studied in historical contexts of idea, style, and technique.

ARTH 112 Drs. Dunn, Miller-Lanning
(CA)History of World Art II 3 credits
The course opens with the history of painting, sculpture, and architecture in Renaissance, Baroque, and eighteenth-century Europe. Introduced by Impressionism, Expressionism, and Cubism, the study of the art of the modern world concludes with a survey of idea, style, and technique in twentieth-century art. (ARTH 111 not a prerequisite.)

ARTH 113 Staff
(CA, D)Topics in Non-Western Arts 3 credits
This course focuses on the history of painting, sculpture and architecture produced by non-western and ethnographic cultures, including, but not limited to, African, Oceanic, Native American, Japanese, Chinese, Islamic, and Indian Art. Courses will vary according to student and faculty interest.

ARTH 114 Staff
(CA,W)History of Architecture 3 credits
A general survey of architectural history from the prehistoric through the modern era, focusing on architectural style, the built environment, and the rituals which condition the use and design of structures and urban spaces. The course features walking tours of Philadelphia and the city of Scranton, as well as guest lectures by area architects.

ARTH 115 Dr. Dunn
Art of the Ancient World 3 credits
(Formerly ARTH 201) A survey of the art and architecture produced between 3000 and 1250 B.C. The course opens in the painted caves of Prehistoric Europe, and continues through the contemporaneous civilizations of the Ancient Near East (Sumer, Babylon, Assyria, Persia) and Egypt.

ARTH 116 Prof. Long
(CA,W)Art of Greece and Rome 3 credits
(Formerly ARTH 202) The course begins in the Aegean with the Minoan and Mycenaean cultures celebrated by Homer; surveys the art of classical Greece; and continues with the art of the Etruscans in ancient Italy. The course concludes with Roman art and architecture (3rd c. B.C. - 5th c. A.D.).

ARTH 117 Dr. Dunn
(W)Early Christian and Byzantine Art 3 credits
(Formerly ARTH 203) The art and architecture produced by the first Christians borrowed much from the forms and ideas of Roman art. The course surveys art produced in Rome, Ravenna, Milan, Greece and Constantinople, 200-1400 A.D. Emphasis will be placed on the origin and symbolism of Christian imagery and architecture.

ARTH 118 Dr. Dunn
(W)Medieval Art: Romanesque and Gothic 3 credits
(Formerly ARTH 204) A survey of art and architecture in western Europe, 1100-1400. Medieval architecture, manuscripts, paintings, and decorative arts will be presented as mirrors of medieval thought and spirituality.

ARTH 205 Dr. Dunn
The Icon in Russian and East European Art 3 credits
This course focuses on theology, image and artistic style in the making of the icon in Russia and East Europe. The icon will be studied in its historical and cultural context from medieval through modern times.

ARTH 210 Staff
(CA, D)Topics on Women in the Visual Arts 3 credits
This cross-disciplinary course presents selected topics on women in the visual arts, including the history of women's achievements and struggles in the visual arts, varied ways of thinking and writing about women, art and culture. Topics will include, but are not limited to: Survey of Women in Art; Being Female in the Renaissance; Medieval Women in Image and Text; Contemporary Women Artists; The Female Artist in Latin America; Women Artists in America; 19th-Century Women Artists, etc.

ARTH 213 Dr. Miller-Lanning
(CA)American Art 3 credits
A survey of American architecture, painting and sculpture from the earliest exploration days. The course will cover art of Native America, the colonial period, the Civil War era and the twentieth century.

ARTH 214 Dr. Dunn
(CA)Renaissance Art and Architecture: 1250-1500 3 credits
(Formerly ARTH 310) A survey of the art produced in Italy, 1250-1500, the course opens with Cimabue in Assisi of St. Francis, continues into the fourteenth century with the frescoes of Giotto and Duccio, and concludes with such fifteenth-century artists as Brunelleschi, Donatello, Botticelli, Leonardo da Vinci, and the young Michelangelo.

ARTH 215 Dr. Dunn
The Renaissance in Northern Europe 3 credits
(Formerly ARTH 311) Art produced in northern Europe (France, Germany, Belgium, and the Netherlands) differs remarkably from the art produced in Italy by Botticelli and Michelangelo. This course surveys painting north of the Alps by such artists as Jan van Eyck, Rogier van der Weyden, Hieronymus Bosch, and Albrecht Dürer.

ARTH 216 Dr. Dunn
(CA,W)Michelangelo and His World 3 credits
(Formerly ARTH 410) This course investigates the painting, sculpture, and architecture of Michelangelo. By considering the artistic traditions to which he fell heir as a Florentine artist, the traditional and the innovative aspects of Michelangelo's work will be assessed. Readings from his letters and poetry and from sixteenth-century biographies will furnish a rich context for the appreciation of his work and for understanding the society to which he belonged.

ARTH 217 Dr. Dunn
(W)Leonardo Da Vinci 3 credits
(Formerly ARTH 411) Artist, scientist, author and free-thinker, Leonardo left few paintings, many drawings, and copious notes attesting the wide range of his intellectual curiosity. This course focuses both on the fifteenth-century world to which the artist belonged and on his many writings in order to measure Leonardo's greatness as prodigy and visionary.

ARTH 218 Prof. Long
(W)The Age of Rembrandt 3 credits
(Formerly ARTH 303) A survey of the painting, sculpture, and architecture produced in Europe between 1600 and 1750. The course opens in Bernini's Rome of the Counter-Reformation and concludes in France at the royal courts of Louis XIV and XV.

ARTH 220 Staff
History of Photography 3 credits
The course explores the historical development of photography and considers the medium's aesthetic components as well as the theoretical and representational issues it raises.

ARTH 221 Dr. Miller-Lanning
Nineteenth-Century Art 3 credits
(Formerly ARTH 304) An exploration of painting and sculpture from Neoclassicism to Symbolism. Special emphasis will be given to works by J.L. David, Goya, Delacroix, Courbet, Manet, Morisot, Rodin, and Van Gogh. In addition to developing skills of visual analysis, the course will focus on the interaction between artist and society.

ARTH 222 Dr. Miller-Lanning
Impressionism and Post-Impressionism 3 credits
(Formerly ARTH 312) Impressionism, an artistic movement linked today with leisure and pleasure, developed out of conflict and challenged many standard European art practices. The course investigates the artistic goals and strategies of Manet, Monet, Degas, Renoir, Morisot, Cassatt and Pissarro and considers how their works respond to important social issues of the day. Paintings by the Postimpressionists Cézanne, Seurat, Van Gogh and Gauguin will be examined as reactions to the aims of Impressionism.

ARTH 225 Dr. Miller-Lanning
Art of the Twentieth Century 3 credits
(Formerly ARTH 305) Beginning with pre-World War I works by Matisse and Picasso, this course surveys the painting, sculpture, architecture and photography of the period known as modernism, ending with an exploration of the contemporary phenomenon of postmodernism. Through examination of both artworks and texts by artists and critics, considerations of style and technique will be integrated with an analysis of historical context.

ARTH 227 Dr. Miller-Lanning
Matisse and Picasso 3 credits
(Formerly ARTH 315) This course examines the works of these two influential modern artists by considering the aesthetic and historical context of their paintings, sculptures, prints, and writings on art.

ARTH 295-296 Dr. Dunn
(Travel Seminar)
Short study trips to provide students with the opportunity to study works of painting, architecture, and sculpture on site. Trips will be designed as themes: i.e., the Art Museums of London and Paris, The Bible in Text and Image (Italy), Renaissance Villas and Palaces, Michelangelo, etc.

ARTH 380 Drs. Dunn, Miller-Lanning
Museum Methods 1-3 credits
(Prerequisites: ARTH 111, 112 and two additional ARTH courses) Offered in cooperation with the Everhart Museum, this course introduces students to ideologies of arts administration and methods of curatorial research and procedure. On-site study at the Everhart Museum is supervised by the Curator of Art and by art-history faculty.

ARTH 384, 484 Dr. Dunn
Special Topics 3 credits
(Prerequisites: ARTH 111, 112 and two additional ARTH courses) Selected topics will vary from year to year on the basis of student/faculty interest and available media resources. Topics may include Art of the Far East, History of Printmaking, etc. Discrete styles and individual artists may also be the focus of a selected topics course.

MUSIC

MUS 111 Staff
(CA)Music History I 3 credits
The history and literature of Western classical music from the medieval period to the eighteenth century, including Gregorian chant, the growth of polyphony, the rise of instrumental music, and the birth and growth of opera.

MUS 112 Staff
(CA)Music History II 3 credits
The history and literature of Western classical music from the eighteenth century to the present, including the increasing importance of instrumental music and opera, the development of atonality and serial music, and the recent avant-garde. MUS 111 is not a prerequisite.

MUS 211 Prof. Garofalo
Keyboard Music 3 credits
Music written for the piano, organ, harpsichord and clavichord from the Renaissance to the twentieth century. The course focuses on the development of keyboard instruments and the forms and composers that dominate the literature.

MUS 213 Prof. Garofalo
Symphony 3 credits
Development of the symphony as an independent genre, from its origins in the mid-eighteenth century to the present day. Works by Haydn, Mozart, Beethoven, Brahms, Tchaikovsky, Mahler, Shostakovich and Stravinsky will be among those considered.

MUS 217 Staff
Opera 3 credits
The history of opera from its beginnings at the turn of the seventeenth century to the present with an emphasis on the nineteenth and twentieth centuries. Representative operas by Mozart, Verdi, Wagner and Puccini, among others, will be examined.

MUS 218 Dr. Perry
American Musical Theatre 3 credits
The development of musical theatre in America from the nineteenth century to the present, emphasizing works composed since the 1940s. Musicals by Jerome Kern, Rodgers and Hammerstein, Lerner and Loewe, Leonard Bernstein, and Stephen Sondheim will be considered.

MUS 219 Prof. Buckley
History of Jazz 3 credits
A detailed examination of a "truly American musical form." Included will be discussions of major stylistic periods, compositions, and performers. Listening examples, as well as live performances, will contribute to an understanding of jazz from its origins to the present day.

MUS 222 Staff
Bach 3 credits
(Formerly MUS 323) The music of Johann Sebastian Bach in the context of the musical forms, styles, and genres current in the first half of the eighteenth century. A survey of Bach's life and works is followed by detailed study of selected vocal and instrumental compositions.

MUS 223 Staff
Mozart 3 credits
(Formerly MUS 324) An examination of Mozart's major works in the genres of symphony, concerto, chamber music, church music, and opera, together with a brief biographical survey. The influence of late eighteenth-century culture and musical conventions on Mozart's work is considered.

MUS 225 Staff
Beethoven 3 credits
(Formerly MUS 325) Study of a composer whose fiery personality drove him to express through music universal concepts in an age of revolution, i.e., freedom and the dignity of the person. Course traces the evolution of Beethoven's major works — sonatas and concertos, symphonies and string quartets as well as Fidelio and the Missa Solemnis — and the effect of his deafness on his view of life and on his later works.

MUS 226 Staff
Romantic Music of the Nineteenth Century 3 credits
A study of the major musical developments in the nineteenth century, the Romantic Period: the rise of piano literature, the art song, chamber and program music, and opera. Attention to nationalism.

MUS 228 Staff
Music of the Twentieth Century 3 credits
(MUS 112 recommended as prerequisite) A study of the history and literature of Western classical music in the twentieth century. The various "isms" of the period, including impressionism, expressionism, neo-classicism, serialism, and minimalism, will be examined.

MUS 233 Staff
Music in America 3 credits
An overview of music in the United States from colonial times to the present, with an emphasis on the twentieth century. Classical, popular, and traditional musical styles are considered, including the symphony, the opera, the Broadway show, jazz, rock, hymnody, and folk music.

MUS 235 Dr. Perry
Music Theory I 3 credits
The fundamental materials of tonal music: notes and rests, rhythm and meter, scales and modes, intervals, triads and seventh chords, melodic and harmonic organization, and an introduction to voice leading and part writing. Some knowledge of music notation helpful.

MUS 236 Dr. Perry
Music Theory II 3 credits
(Prerequisite: MUS 235) Extension of the tonal vocabulary to include chromatic harmony, modulatory techniques, and the use of extended chords, as well as an overview of selected post-tonal procedures.

MUS 280 Staff
Liturgical Music 3 credits
The role of music in the Roman Catholic Church. Emphasis on the practical rather than the historical. Recommended for any lay person or member of the clergy involved in developing church liturgy. No musical background required.

MUS 335 Staff
Introduction to Composition 3 credits
(Prerequisite: MUS 235, 236) Guided individual projects in original composition, together with the analysis of selected works from the classical repertory.

MUS 284 Staff
Special Topics 3 credits
Selected topics in music history will vary from year to year in accord with student/faculty interest.

BIOLOGY

DR. MICHAEL A. HARDISKY, Chairperson

Courses in the Department of Biology are designed to achieve the following objectives: 1. To present the fundamental scientific facts and concepts which are needed for an understanding of the living world and people's relation to it; 2. To prepare students for advanced study or work in other biological fields.

The Bachelor of Science degree in Biology program supplies preprofessional preparation meeting all requirements and recommendations of professional schools (medicine, dentistry, veterinary medicine, optometry, podiatry).

While the department's record in the preparation of physicians is an impressive one as indicated in the Pre-Medical section, its record as one of the baccalaureate sources of Ph.D.'s in the biological sciences is equally prestigious. In this respect, a 1988 study by the Office of Institutional Research at Franklin and Marshall College shows that over the previous 66 years, The University of Scranton ranked 48th out of 877 four-year private, primarily undergraduate, institutions.

The biology curriculum appears below. In addition to the nine-credit freshman course in General Biology, biology majors will select 33 credits of Biology electives with at least one course in each of the following five course groups (special exemption may be made by permission of the chairperson):

Cellular (C) - BIOL 250, 255, 344, 346, 348, 349, 350, 351, 352, 354, 358, 445, 450
Molecular (M) - BIOL 250, 263, 344, 350, 351, 358, 361, 362, 364
Organismal (0) - BIOL 195, 196, 225, 241, 243, 245, 250, 255, 344, 345, 346, 347, 348, 349, 351, 354, 370, 445, 446, 473
Genetics (G) - BIOL 260, 263, 361, 362, 375
Population (P) - BIOL 195, 196, 272, 273, 345, 349, 370, 371, 375, 471, 472, 473

Biology majors may use up to six credits in Chemistry (CHEM 350, 351, 360, 450, 451) as Biology electives.

The premedical advisor's elective recommendations for pre-professional students are listed on page 372.

MINOR: To gain a minor in Biology, a student must complete Biology 141-142, including the laboratory, and 15 additional credits of courses suitable for the Biology major. Biology electives must be selected from at least three of the five established course groups, and must include at least three credits of advanced laboratory work. It is strongly suggested that a potential Biology minor seek the advice of the department's chairperson concerning the selection of electives suitable to his/her personal goals.

*** Please note: Biology courses numbered 100-139 and 200-239 are not open to Biology majors. Courses with a title prefixed by an asterisk require concurrent enrollment in lecture and lab.**

BIOLOGY

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR (GE NSCI)	BIOL 141 -142	General Biology	4½	4½
COGNATE	CHEM 112 -113	General Analytical Chemistry I-II	4½	4½
GE WRTG-SPCH	WRTG 107- COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE PHIL	PHIL 120	Introduction to Philosophy	3	
GE HUMN	HUMN ELECT	Humanities Elective		3
GE FSEM	INTD 100	Freshman Seminar	1	
			16	**18**
		SECOND YEAR		
MAJOR	BIOL	Biology Electives	4½	4
COGNATE	CHEM 232 - 233	Organic Chemistry I -II	4½	4½
GE QUAN-COGNATE	MATH 103 -114[1]	Pre-Calculus Math. - Analysis I	4	4
GE S/BH	S/BH ELECT	Social/Behavioral Elective		3
GE PHIL - T/RS	PHIL 210-T/RS 121	Ethics-Theology I	3	3
GE PHED	PHED ELECT	Physical Education	1	
			17	**18½**
		THIRD YEAR		
MAJOR	BIOL	Biology Electives	4½	5
COGNATE	PHYS 120-121	General Physics I-II	4	4
GE S/BH	S/BH ELECT	Social Behavioral Elective	3	
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE T/RS	T/RS 122	Theology II	3	
GE ELECT	ELECT	Free Elective		3
GE PHED	PHED ELECT	Physical Education		1
			17½	**16**
		FOURTH YEAR		
MAJOR	BIOL	Biology Electives	7½	7½
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or TR/S Elective		3
GE HUMN	HUMN ELECT	Hmanities Elective	3	
GE ELECT	ELECT	Free Electives	6	3
GE PHED	PHED ELECT	Physical Education		1
			16½	**14½**
			Total: 134 CREDITS	

[1]MATH 103 (taken before MATH 114) if indicated by Math Placement Test. Otherwise, credits may be taken in math, biology, chemistry or physics.

BIOL 100 Staff
***(E)Modern Concepts of Biology** 4 credits
Exploration of the practical impact which modern biological concepts have on our lives. Topics include cell function, genetics, plant and human biology, genetic engineering, cancer, AIDS and dying. Provides a framework for making informed ethical decisions regarding pertinent biological issues. Three hours lecture; two hours lab. Fall only.

BIOL 101 Staff
(E)Introduction to Biological Science 3 credits
An introduction to the fundamental concepts, principles and theories of modern biology. Critical components of the course include a discussion and application of the scientific method in discovery and learning, discussion of experimental and statistical techniques, examination of the historical and cultural fabric of biological science, and discussion of the impact of biological research and development on modern society. Three hours lecture.

BIOL 105 Dr. Conway
(E)Biodiversity 3 credits
An examination of the variety of animal and plant species, especially in the two most diverse ecosystems: the coral reef and the tropical rain forest. The foundations of biological diversity will be studied: ecology, systematics, evolution and biogeography. The effects of historical, cultural, economic, religious and political forces on biodiversity will be analyzed. Current topics will be discussed, such as deforestation, human population growth, endangered species and global warming. Three hours lecture.

BIOL 108 Dr. Voltzow
***(E)History of Life on Earth** 3 credits
Sequence of appearance of life on earth based on the geological record. Topics include the origin of life on earth, patterns and processes of the fossil record, and an introduction to the diversity of life, past and present. Three hours lecture.

BIOL 110 & 111 Staff
***(E)Structure and Function of the Human Body** 8 credits
A general study of the anatomy and physiology of the human organism, emphasizing the body's various coordinated functions from the cellular level to integrated organ systems. Three hours lecture, two hours lab each semester.

BIOL 141 & 142 Staff
***(E)General Biology** 9 credits
A comprehensive study of the nature of living organisms, both plant and animal, their structure, function, development and relationships, including the problems of development, heredity and evolution. Three hours lecture, three hours lab each semester.

BIOL 195 Dr. Conway
(E)Tropical Biology (O, P) 3 credits
Study of tropical communities with emphasis on the coral reef. Introduction to a variety of other tropical areas, such as sandy beaches, turtle grass beds, mangrove swamps, tide pools, rocky shores, and rain forests. Approximately two weeks will be spent at a biological station in the American tropics. Swimming proficiency required. Intersession only.

BIOL 196 Dr. Conway
African Photo Safari (O, P) 3 credits
Natural history of Eastern Equatorial Africa with special emphasis on the delicate ecological balance between plant and animal communities. The savannah plains, tropical mountain forests, northern frontier and Great Rift Valley will be visited for first-hand study of the tremendous diversity of fauna and flora. Intersession only.

BIOL 201 Dr. Kwiecinski
(E)Anatomy & Physiology 3 credits
(Prerequisite: BIOL 101) An introduction to the biochemical, cellular, tissue and organismal organization of selected body functions; structure in relation to function is emphasized. Three hours lecture.

BIOL 202 Dr. McDermott
(E)The ABC's of Genetics 3 credits
Heredity for the non-science major, with emphasis on the human. Provides the background necessary for the non-scientist to understand his/her own hereditary background and to have informed opinions about societal issues related to genetics. Includes Mendelian, molecular, and population genetics, evolution, genetic diseases, genetic engineering, etc. Three hours lecture.

BIOL 210 Dr. McDermott
***Introductory Medical Microbiology** 3 credits
(Pre- or co-requisites: BIOL 110-111, CHEM 110-111) Fundamentals of microbiology, including structure, function, identification, pathogenesis, epidemiology and control of microorganisms with emphasis on human pathogens. Two hours lecture, two hours lab. Fall only.

BIOL 241 Fr. MacEntee
***Comparative Vertebrate Anatomy (O)** 5 credits
(Prerequisites: BIOL 141-142) Structure and phylogeny of vertebrate organ-systems, emphasizing and comparing vertebrate structures in relation to their functions. Amphioxus, shark, necturus, and the fetal pig are subjected to detailed laboratory study. Three hours lecture, four hours lab. Fall only.

BIOL 243 Fr. MacEntee
***The Human Body (O)** 5 credits
(Prerequisites: BIOL 141-142) Structure and function of the principal organ systems in mammals, emphasizing the human condition. The cat is subjected to detailed study in the laboratory. Three hours lecture, four hours lab. Spring only.

BIOL 245 Staff
***General Physiology (O)** 4½ credits
(Prerequisites: BIOL 141-142, CHEM 112-113) Physiological processes underlying functioning of the animal organism. Study of irritability, excitation, conduction, contractility, cellular physiology, and functions of mammalian organ-systems. Three hours lecture, three hours lab.

BIOL 250 Frs. Beining, Cadigan, Dr. Sulzinski
***Microbiology (C, O, M)** 5 credits
(Prerequisites: BIOL 141-142, CHEM 112-113) Structure, function, growth, reproduction, heredity and relationships of bacteria, yeasts, molds, viruses; a brief survey of pathogens, life cycles of parasitic microzoa; introduction to disease and immunology. Three hours lecture, four hours lab; not open to Nursing majors.

BIOL 255 Dr. Kwiecinski
Animal Nutrition and Metabolism (C, O) 3 credits
(Prerequisites: BIOL 141-142, concurrent enrollment in Chem 233, if not already successfully completed) A survey of concepts and disciplines within the nutritional sciences. Lectures and discussion address basic sciences, biological factors, and current controversies that are encompassed by the nutritional sciences. Course content includes physiological systems directly and indirectly influencing nutrition and metabolism, nutrients and their metabolism, energy balance, food technology, and agribusiness. Spring semester

BIOL 260 Dr. McDermott
Genetics (G) 4½ credits
(Prerequisites: BIOL 141-142) Mendelian, cyto-, population and evolutionary, and basic molecular genetics; emphasis on eucaryotes. Three hours lecture, three hours lab.

BIOL 263 Dr. Dwyer
***Genetic Engineering** 5 credits
(Prerequisites: BIOL 141-142) Study of the nature and function of the gene with emphasis on the experimental evidence which gave rise to the present concepts of genetic engineering. Strong emphasis is placed on recombinant DNA techniques in both lecture and laboratory. Three hours lecture, three hours lab.

BIOL 272 Dr. Voltzow
***Invertebrate Biology (O, P)** 5 credits
(Prerequisites: BIOL 141-142) Structure and function of the major groups of invertebrates with emphasis on their evolutionary relationships. Labs focus on the diversity of invertebrate forms and include field trips. Three hours lecture, three hours lab. Fall, odd years.

BIOL 273 Dr. Voltzow
Marine Ecology (P) 3 credits
(Prerequisites: BIOL 141-142) Diversity of marine habitats and of the organisms that inhabit them. Lectures and discussion address the physical and biological factors that influence the distribution and ecology of organisms in the various marine environments, including intertidal, estuarine, benthic, coral reef, and open ocean communities. The effects of humans on the sea will be assessed. Three hours lecture.

BIOL 344 Frs.Beining,Cadigan
Principles of 4½ credits
Immunology (C,O,M)
(Prerequisite: BIOL 250 strongly recommended for 344 lecture, required for 344 lab) The basic molecular, cellular and organismal aspects of the immune response, emphasizing chemical and functional bases of antigens and immunoglobulins, cellular and humoral response, tolerance, immune deficiency, hypersensitivity, autoimmunity, blood groups, transplantation. Three hours lecture, three hours lab. Spring only.

BIOL 345 Dr. Voltzow
Comparative Animal 3 credits
Physiology (P,O)
(Prerequisite: BIOL 245) The physiological principles involved in adaptations of animals to their environment from a comparative viewpoint; osmotic control, temperature regulation, nerve and muscle physiology, sensory perception, etc. Three hours lecture.

BIOL 346 Dr. J. Carey
Endocrinology and 3 credits
Reproduction (C,O)
(Prerequisite: BIOL 245) The mammalian endocrine system; emphasis on molecular mechanisms of hormone action, feedback control of hormone production, integration with other physiological systems, and reproductive endocrinology. Three hours lecture. Spring only.

BIOL 347 Dr. Conway
Exercise Physiology (O) 3 credits
(Prerequisite: BIOL 245) Study of the anatomical and physiological effects of exercise, centering around control of physical performance by capacity to generate energy through aerobic and anaerobic pathways; includes the effects of heredity, age, nutrition, training and environment on performance. Emphasizes the multidimensional role of exercise in weight control, cardiovascular fitness, stress management, fatigue, strength, etc. Three hours lecture/demonstration. Spring, odd years.

BIOL 348 Dr. Waldeck
Neurophysiology (C, O) 4½ credits
(Prerequisite: BIOL 245, or, for neuroscience majors, PSYC 231) Study of the organization and function of the neuron, neural circuits, and the major sensory and motor components of the central nervous system; bioelectric phenomena, synaptic transmission; the neural basis for higher functions such as cognition, memory, and learning. Three hours lecture; three hours lab.

BIOL 349 Dr. Hardisky
Plant Physiology (C, O, P) 5 credits
(Prerequisite: BIOL 141 or 101 or permission of instructor) Functional anatomy and physiology of plants, including structure, photosynthesis, respiration, mineral nutrition, water relations, productivity, growth and differentiation, transport, stress physiology, and energy flow. Three hours lecture, Three hours lab. Lab is writing-intensive (W). Spring, odd years.

BIOL 350 Staff
*** Cellular Biology (C, M)** 5 credits
(Prerequisites: BIOL 141-142) Study of structure-function relationships in eukaryotic cells. Emphasis on cell membranes, cell organelles, cytoskeleton, and extracellular matrices. Regulation of cell proliferation, signaling, recognition/adhesion and motility will be examined, particularly as they relate to malignancy. Labs focus on experimental studies of cellular structure and function using techniques of modern cell biology. Three hours lecture, Three hours lab. Lab fulfills a writing-intensive requirement (W). Fall only.

BIOL 351 Staff
*** Developmental** 5 credits
Biology (C, O, M)
(Prerequisites: BIOL 141-142) Development of vertebrates and invertebrates from gametogenesis through organogenesis. Emphasis on cellular and molecular mechanisms involved in differentiation, morphogenesis, and determination of the body plan. Labs focus on experimentation with living, developing organisms. Three hours lecture, three hours lab. Spring only.

BIOL 352 Dr. Kwiecinski
*** Histology (C)** 5 credits
(Prerequisites: BIOL 141-142; BIOL 241 strongly recommended) Microscopic structure and function of the four basic vertebrate tissues. Emphasis will be placed on mammalian tissues. Lectures include historical, theoretical and practical perspectives. Laboratories include examination of tissues through the use of loan sets of slides as well as demonstrations and exercises in basic preparation of tissues for microscopic examination. Three hours lecture, four hours lab. Fall only.

BIOL 354 Dr. Kwiecinski
Special Histology: 5 credits
(Prerequisites: CHEM 232-233, BIOL 352) Microscopic recognition and functional correlations of the major vertebrate organ systems. Enrollment is limited to preserve informal and flexible working conditions appropriate to advanced histological work. This course is customized to the participants' needs. Options include in-depth training in techniques or in-depth analysis of a particular organ system. Two hours lecture, five hours lab. Spring only.

BIOL 358 Staff
Cellular and Molecular Neurobiology (C, M) 3 credits
(Prerequisites: BIOL 141-142) Introduces Biology and Neuroscience majors to the cellular and molecular biology of the vertebrate nervous system. Includes ion channel structure and function, synthesis, packaging and release of neurotransmitters, receptor and transduction mechanisms, intracellular signalling, cell-to-cell communication, glial cell function, and neural growth and development. Three hours lecture.

BIOL 361 Dr. Dwyer
*** Molecular Biology I (M, G)** 5 credits
(Prerequisites: BIOL 141-142, CHEM 232, Co-requisite: CHEM 233) Structure and function of prokaryotic cells from a molecular viewpoint. Study of biomacromolecule structure and function; bacterial DNA replication, transcription, translation and how these processes are regulated. Three hours lecture, three hours lab. Spring only.

BIOL 362 Dr. Dwyer
Molecular Biology II (M, G) 5 credits
(Prerequisite: BIOL 361 or CHEM 350) The structure and function of eukaryotic cells and organisms from a molecular viewpoint. Study of eukaryotic genome and gene organization, DNA packaging and replication, RNA transcription and splicing, translation into proteins and how these processes are regulated. Discussion of HIV, cancer, and evolution on the molecular level. Three hours lecture, three hours lab optional. Fall only. Lab fulfills a writing-intensive (W) requirement.

BIOL 364 Dr. Sulzinski
Virology (M) 5 credits
(Prerequisites: BIOL 141-142, CHEM 232-233) A detailed survey of viruses important to animals and plants, including structure, replication, pathogenicity and diagnostic techniques. Strong emphasis is placed on the molecular biology of viruses in both lecture and lab. Three hours lecture, three hours lab. Fall only.

BIOL 370 Dr. M. Carey
Animal Behavior (P, O) 4½ credits
(Prerequisites: BIOL 141-142) Classification of behavior types, development, functional advantages and evolution of behavior, and social and physiological aspects studied in lower and higher organisms. Three hours lecture, two hours lab. Spring only. The laboratory fulfills a writing-intensive requirement (W).

BIOL 371 Dr. Townsend
Ecology (P) 5 credits
(Prerequisites: BIOL 141-142) Study of physical, chemical, and biological factors that influence the distribution and abundance of organisms and determine the relationships among organisms from the population to the ecosystem level. Three hours lecture, three hours lab. Fall only.

BIOL 375 Dr. M. Carey
Evolution (G, P) 3 credits
(Prerequisites: BIOL 141-142) A consideration of the theories of evolution and evidences for them in plants and animals. Population genetics and the adaptiveness of various organic traits will be discussed. Three hours lecture. Fall only.

BIOL 379 Dr. Townsend
Biostatistics 3 credits
(Prerequisite: MATH 103) Data analysis and statistical techniques in biology and medicine; probability and frequency distributions, descriptive statistics, hypothesis testing, and various parametric and nonparametric statistical tests. Use of one or more computerized statistical programs. Three hours lecture. Spring only.

BIOL 384 Staff
Special Topics in Biology 2-4 credits
Study of selected topics in biology, varying from year to year in accord with student/faculty interest and current research advances. May include such topics as sensory reception, membrane biology, population genetics, etc.

BIOL 393-394 Staff
Undergraduate Research Variable credit
(Prerequisite: 12 credits in Biology) Individual problems for advanced students with sufficient background in biological and physical sciences.

BIOL 445 Dr. Kwiecinski
Mammalian Physiology (C, O) 3 credits
(Prerequisites: BIOL 245, CHEM 232-233) Molecular, cellular, and tissue aspects of selected organ systems not normally covered in General Physiology, including calcium and skeletal homeostatic systems, integumentary system, gastrointestinal system, and aspects of nervous, endocrine, reproductive, and lymphatic systems. Three hours lecture.

BIOL 446 Dr. Sweeney
Cardiovascular Physiology (O) 3 credits
(Prerequisites: BIOL 245, PHYS 120 or 140) The physiological and biophysical bases of cardiovascular function, including cardiac electrophysiology and mechanics; regulation of the heart and the peripheral circulation; hemodynamics; solute and fluid exchange; and cell-cell interactions governing white blood cell transit. Special circulations will highlight the role of cardiovascular regulation in overall physiological function. Three hours lecture.

BIOL 450 Staff
***Electron Microscopy (C)** 5 credits
(Prerequisites: BIOL 141-142) Introduction to the mechanics of the electron microscope with emphasis on standard laboratory techniques, including preparation of materials, sectioning, viewing and photographic analysis. One hour lecture, six hours lab.

BIOL 471 Staff
Applied Ecology (P) 3 credits
(Prerequisite: BIOL 371) The application of ecological principles and concepts to environmental problems, including consideration of their origins, effects on living systems, and potential solutions. Consideration of such issues as biodiversity, habitat degradation and loss, conservation biology, ecosystem management, wildlife ecology, agroecology, pollution, and global climate change. Three hours lecture.

BIOL 472 Dr. Hardisky
Systems Ecology (P) 3 credits
(Prerequisite: BIOL 371) The study of ecosystem dynamics and their relationship to the functioning of the biosphere. A quantitative approach to ecosystem structure and function, emphasizing the use of simulation and conceptual models. The course will involve opportunities to construct and test simulation models. Three hours lecture. Spring, even years.

BIOL 473 Dr. Hardisky
Estuarine Ecology (O, P) 5 credits
(Prerequisites: BIOL 141 or 101 or permission of instructor) The ecology of marine and estuarine systems, including soil chemistry, halophyte physiology, tidal marsh ontogeny, ecosystem function and the consequences of human alteration of the coastal zone. Lab includes a week-long field trip during Spring Break to Sapelo Island, Georgia, and Cocodrie, Louisiana. Three hours lecture, three hours lab. Spring, even years.

CHEMISTRY

DR. DAVID E. MARX, Chairperson

The department offers five majors: Chemistry, Biochemistry, Chemistry-Business, Chemistry-Computers, and Medical Technology. The program in Chemistry is approved by the American Chemical Society, which means that graduates may be certified by the American Chemical Society if they meet the requirements. In addition, outstanding students in the Chemistry and Biochemistry majors are eligible for consideration in the Combined, Five-Year Baccalaureate/Master's Degree program (please refer to the section on The Graduate School, page 355, and to the Graduate School Catalog for specifics of the program). The strength of the department is indicated by the fact that The University of Scranton has been one of the leading schools in the country in the number of master's degrees awarded in chemistry.

The prestige of the department is also demonstrated by a study of the Office of Institutional Research at Franklin and Marshall College which ranked the University of Scranton 34th out of 917 private, four-year, primarily undergraduate colleges as the baccalaureate source of those earning Ph.D.'s in Chemistry between 1981 and 1990.

Recent graduates of the department have been admitted to doctoral programs at a number of major universities including Harvard, Cornell, Johns Hopkins and the University of Pennsylvania. In addition, some graduates have attended medical and dental schools, and some have gone on to law school.

CHEMISTRY

	Dept.and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR (GE NSCI)	CHEM 112-113	General Analytical Chem. I-II	4½	4½
COGNATE (GE QUAN)	MATH 114-221	Analysis I-II	4	4
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE T/RS-PHIL	T/RS 121-PHIL 120	Theology I-Introduction to Philosophy	3	3
GE HUMN	HUMN ELECT	Humanities Elective		3
GE FSEM	INTD 100	Freshman Seminar	1	
			18½	**17½**
		SECOND YEAR		
MAJOR	CHEM 232-233	Organic Chemistry I-II	4½	4½
MAJOR	CHEM 240	Inorganic Chemistry		3
COGNATE	MATH 222[1]	Analysis III	4	
COGNATE	PHYS 140-141	Elements of Physics	4	4
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE ELECT	CMPS 134	Computer Science I		3
GE PHED	PHED ELECT	Physical Education	1	
			16½	**17½**
		THIRD YEAR		
MAJOR	CHEM 330	Organic Chem. III	5	
MAJOR	CHEM 370	Instrumental Analysis		5
MAJOR	CHEM 362-363	Physical Chem. I-II	4½	4½
MAJOR	CHEM 390-391	Chem. Literature-Seminar	1	1
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE S/BH	S/BH ELECT	Social/Behavioral Electives	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			17½	**17½**
		FOURTH YEAR		
MAJOR	CHEM 440-440L	Adv. Inorganic Chem.-Lab	3	1½
MAJOR	CHEM 493-494	Undergraduate Research	1½	1½
MAJOR	CHEM ELECT	Chem Elec.-300 Level or above	3	
GE PHIL-T/RS	PHIL -T/RS ELECT	Philosophy or T/RS Elective		3
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE ELECT	ELECT	Free Electives	3	6
			13½	**12**

Total: 130½ CREDITS

[1] For ACS certification, Chemistry majors must complete MATH 222, MATH 341, CHEM 350 or 450, and one upper-division chemistry elective.

The **MINOR** in Chemistry will include the following requirements: Organic Chemistry (6 credits), Physical Chemistry (6 credits), and a chemistry laboratory course (3 credits).

BIOCHEMISTRY

The department offers two tracks of study for biochemistry majors. The tracks are similar for the first three semesters, allowing students the option to change between the two tracks within that time frame, should their career goals change. The research track prepares students for graduate study in biochemistry or for a career in which independent research experience would be beneficial. The pre-professional track is more flexible and allows students a greater selection of elective courses in chemistry and biology in order to tailor their course of study to meet their individual career goals. The pre-professional track provides a strong background for students pursuing further studies in law or medicine or career paths not emphasizing research.

BIOCHEMISTRY RESEARCH TRACK

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
MAJOR (GE NSCI)	CHEM 112-113	General Analytical Chem. I-II	4½	4½
COGNATE (GE QUAN)	MATH 114	Analysis I	4	
COGNATE	BIOL 141-142	General Biology I-II	4½	4½
GE WRTG-SPCH	WRTG 107 - COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			17	**16**
		SECOND YEAR		
MAJOR	CHEM 232-233	Organic Chemistry I-II	4½	4½
MAJOR	CHEM 240	Inorganic Chemistry		3
COGNATE	PHYS 120-121[2]	General Physics I-II	4	4
GE ELECT	CMPS 134	Computer Science I	3	
GE T/RS	T/RS 121	Theology I	3	
GE PHIL	PHIL 120	Introduction to Philosophy		3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE PHED	PHED ELECT	Physical Education	½	½
			18	**18**
		THIRD YEAR		
MAJOR	CHEM 330	Organic Chemistry III	3½	
MAJOR	CHEM 370	Instrumental Analysis		5
MAJOR	CHEM 360-361	Biophysical Chemistry I-II	4½	4½
MAJOR	CHEM 390-391	Chemistry Literature-Seminar	1	1
COGNATE	COGNATE ELECT[1,2]	Cognate Electives (210 level or above)	3	
GE T/RS	T/RS 122	Theology II	3	
GE PHIL	PHIL 210	Ethics		3
GE S/BH	S/BH ELECT	Social/Behavioral Electives	3	3
GE PHED	PHED ELECT	Physical Education		1
			18	**17½**
		FOURTH YEAR		
MAJOR	CHEM 450-451	Biochemistry I-II	3	3
MAJOR	CHEM 450L	Biochemistry Lab	1½	
MAJOR	CHEM 493-494	Undergraduate Research	1½	1½
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	COGNATE ELECT[1,2]	Cognate Elective (210 level or above)		3
GE ELECT	ELECT	Free Elective		3
			12	**13½**

Total: 130 CREDITS

[1] Cognate electives for the Biochemistry major may be taken in any of the following disciplines: Biology, Chemistry, Computer Science, Environmental Science, Mathematics or Physics and certain Psychology courses (Psyc 210, 231 and Psyc 384: Psychopharmacology)

[2] For ACS certification, Biochemistry majors must take MATH 114, 221, 222, 341; PHYS 140-141 in place of PHYS 120-121; and CHEM 440 and 440L; and one course from the following: BIOL 250, 260, 263, 350, 361, or another Biology course approved by the Chemistry Dept.

BIOCHEMISTRY PRE-PROFESSIONAL TRACK

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FIRST YEAR		
MAJOR (GE NSCI)	CHEM 112-113	General Analytical Chem. I-II	4½	4½
COGNATE	BIOL 141-142	General Biology I-II	4½	4½
COGNATE (GE QUAN)	MATH 103/114	Pre-Calc-Analysis I	4	4
GE WRTG	WRTG 107	Composition	3	
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			17	**17**
		SECOND YEAR		
MAJOR	CHEM 232-233	Organic Chem I-II	4½	4½
COGNATE	PHYS 120-121	General Physics I-II	4	4
GE SPCH	COMM 100	Public Speaking		3
GE T/RS	T/RS 121	Theology I	3	
GE PHIL	PHIL 120	Introduction to Philosophy		3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE S/BH	S/BH ELECT	Social/Behavioral Elective	3	
GE PHED	PHED ELECT	Physical Education	½	½
			18	**18**
		THIRD YEAR		
MAJOR	CHEM 360	Biophysical Chemistry	4½	
MAJOR	CHEM 370	Instrumental Analysis		5
MAJOR	CHEM 450-451	Biochemistry I-II	4½	3
MAJOR	CHEM 390	Chem Literature	1	
GE T/RS	T/RS 122	Theology II	3	
GE PHIL	PHIL 210	Ethics		3
GE S/BH	S/BH ELECT	Social/Behavorial Elective		3
GE ELECT	ELECT	Free Elective	3	
GE PHED	PHED ELECT	Physical Education		1
			16	**15**
		FOURTH YEAR		
MAJOR	CHEM ELECT	Adv. Topics-Biochemistry		3
MAJOR/COGNATE	CHEM/BIO ELECT	Chem or Bio Elective*	3-5	
COGNATE	COGNATE ELECT	Biology Elective*	3-5	3-5
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT	Free Electives	3	6
			15-19	**15-17**
			Total: 131-137 CREDITS	

Note: Senior year must contain at least 2 credits of laboratory or research.
*Advanced biology courses are those courses which the Biology Department designates in the cellular, molecular or genetics areas.

MINOR: The following requirements are needed for a minor in Biochemistry: Organic Chemistry (Chem 232-233), Biochemistry I (Chem 350 or 450), Biochemistry II or Biophysical Chemistry (Chem 351 or 451 or 360), and Chemistry laboratory (3 credits).

CHEMISTRY-BUSINESS

The Chemistry-Business major combines theoretical and technical instruction in chemistry with management training in business. Graduates of this program will be concerned not only with chemical research and technological development but also with management problems in science-related industries.

Most Chemistry majors tend to be research-oriented although almost half of the approximately 100,000 chemists employed in American private industry are engaged in work other than research and development: management, marketing and sales. This combined degree was formulated to prepare chemists to assume these latter responsibilities.

From the point of view of the business student, almost one-third of all business graduates can expect to be employed in a chemistry-related field: pharmaceuticals, plastics, petroleum, etc. Most Business majors employed in such industries must develop, often on their own, the technical knowledge needed to understand their company's operations and products. A fundamental background in chemistry as provided in this concentration is a distinct advantage to individuals planning such careers.

CHEMISTRY-BUSINESS

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
MAJOR (GE NSCI)	CHEM 112-113	General Analytical Chem. I-II	4½	4½
COGNATE (GE QUAN)	MATH 103-114 or 114-221	Pre-Calc.-Analysis I or Analysis I-Analysis II	4	4
COGNATE (GE S/BH)	ECO 153-154	Prin. of Micro. & Macro. Econ.	3	3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE FSEM	INTD 100	Freshman Seminar	1	
			15½	**17½**
		SECOND YEAR		
MAJOR	CHEM 232-233	Organic Chemistry I-II	4½	4½
MAJOR	ACC 253-254	Financial-Managerial Acctg.	3	3
GE ELECT	ELECT	Free Elective		3
GE T/RS	T/RS 121-122	Theology I & II	3	3
GE PHIL	PHIL 120	Introduction to Philosophy	3	
GE HUMN	FOR LANG[1]	Electives	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			17½	**17½**
		THIRD YEAR		
MAJOR	CHEM 320-391	Industrial Chem. I-Chem. Seminar	3	1
MAJOR	MGT 351-352	Principles of Management I-II	3	3
MAJOR	MKT 351	Intro. to Marketing	3	
MAJOR	FIN 351	Intro. to Finance		3
COGNATE	CMPS 330	Information Systems	3	
COGNATE	MATH 204	Special Topics in Statistics		3
GE ELECT	CHEM ELECT	Chem. (210 level or above)		3
GE PHIL-T/RS	PHIL 210-ELECT	Ethics-Philosophy or T/RS Elective	3	3
GE PHED	PHED ELECT	Physical Education	1	
			16	**16**
		FOURTH YEAR		
MAJOR	OIM 351-OIM 352	Intro. to Mgt Science-Op Mgt	3	3
MAJOR	MGT 251	Legal Environment of Business	3	
COGNATE	PHYS 120-121	General Physics	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT	Free Electives	3	6
			15	**15**
				Total: 130 CREDITS

[1]The Department recommends foreign language.

CHEMISTRY-COMPUTERS

The Chemistry-Computers program is designed to provide a vehicle for preparing students in the area of intensive computer use in the field of chemistry. The use of computers has long been important in chemistry, but in recent years areas such as molecular modeling and design have become increasingly important. Drug companies use these techniques for the design of drugs for particular medical problems. In addition, most of the modern analytical instruments are highly enhanced by on-line computer processing of data. This program is designed to enable students to enter industry or graduate programs in areas such as computational chemistry, chemical information retrieval, or molecular design.

CHEMISTRY-COMPUTERS

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR (GE NSCI)	CHEM 112-113	General Analytical Chem. I-II	4½	4½
MAJOR	CMPS 134-144	Computer Science I-II	3	4
COGNATE (GE QUAN)	MATH 142-114	Discrete Structures-Analysis I	4	4
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE T/RS	T/RS 121	Theology I		3
GE FSEM	INTD 100	Freshman Seminar	1	
			18½	**18½**
		SECOND YEAR		
MAJOR	CHEM 232-233	Organic Chemistry I-II	4½	4½
MAJOR	CMPS 240-250	Data Struct.-Mach. Org.	3	3
COGNATE	MATH 221-222	Analysis II-III	4	4
COGNATE	PHYS 140-141	Elements of Physics	4	4
GE PHIL-T/RS	PHIL 120-T/RS 122	Introduction to Philosophy-Theology II	3	3
			18½	**18½**
		THIRD YEAR		
MAJOR	CHEM 370	Instrumental Analysis		5
MAJOR	CHEM 362-363	Physical Chemistry I-II	3	3
MAJOR	CHEM 390-391	Chemistry Literature-Seminar	1	1
MAJOR	CMPS 352	Operating Systems	3	
COGNATE	MATH 341	Differential Equations		4
GE PHIL	PHIL 210	Ethics	3	
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE S/BH	S/BH ELECT	Social/Behavioral Elective	3	
PHED	PHED ELECT	Physical Education	1	1
			17	**17**
		FOURTH YEAR		
MAJOR	CHEM 493-494	Undergraduate Research	1½	1½
GE ELECT	CHEM or CMPS ELECT	Chem. Cmps. Elec.-300 Level or above	3	3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE S/BH	S/BH ELECT	Social/Behavioral Elective		3
GE ELECT	ELECT	Free Electives	3	3
GE PHED	PHED ELECT	Physical Education	1	
			14½	**13½**
			Total: 136 CREDITS	

B.S. IN MEDICAL TECHNOLOGY

The Bachelor of Science in Medical Technology degree program, under the direction of Dr. Trudy Dickneider, is designed to train and qualify students as medical technologists or clinical laboratory scientists serving hospitals, clinical laboratories, industrial or research institutions. The program meets and exceeds the requirements of the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). The program involves the satisfactory completion of the first three years of a curriculum of study (indicated below) at the University of Scranton and the fourth year of clinical education at a hospital having a School of Medical Technology approved by NAACLS. After completing the program, students take a national certification examination. To date the University has arranged affiliation with hospitals in the cities of Abington, Williamsport and Wilkes-Barre. See affiliations at the end of this Bulletin.

The curriculum for the BSMT closely parallels the B.S. in Biochemistry program so that students have the option to change to the latter after two years, should their career goals change.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
MAJOR (GE NSCI)	CHEM 112-113	Gen. Analytical Chem. I-II	4½	4½
COGNATE (GE QUAN)	MATH 103-114	Pre-Calculus, Analysis I	4	4
GE ELECT	BIOL 141-142	General Biology I-II	4½	4½
GE SPCH	COMM 100	Public Speaking		3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1	1
			17	**17**
		SECOND YEAR		
MAJOR	CHEM 232-233	Organic Chem. I-II	4½	4½
GE ELECT	BIOL 250-245	Microbiology-Physiology	5	4½
GE T/RS	T/RS 121-122	Theology I-II	3	3
GE PHIL	PHIL 120	Introduction to Philosophy	3	
GE WRTG	WRTG 107	Composition	3	
GE S/BH	S/BH ELECT	Social/Behavioral Elective		3
GE HUMN	HUMN ELECT	Humanities Elective		3
			18½	**18**
		THIRD YEAR		
MAJOR	CHEM 350	Intro. to Biochemistry	3	
MAJOR	CHEM 370	Instrumental Analysis		5
COGNATE	BIOL 344	Immunology		3
GE PHIL-PHIL-T/RS	PHIL 210-PHIL or T/RS	Ethics-Philosophy or T/RS Elective	3	3
GE HUMN	HUMN ELECT	Humanities Electives	6	3
GE S/BH	S/BH ELECT	Social/Behavioral Elective	3	
GE PHED	PHED ELECT	Physical Education	1	1
			16	**15**
		FOURTH YEAR		
MAJOR		Clinical Education		
MAJOR		Clinical Microbiology		
MAJOR		Clinical Chemistry		
MAJOR		Clinical Hematology/Coagulation		
MAJOR		Clinical Immunohematology		
MAJOR		Clinical Immunology/Serology		
MAJOR		Clinical Seminar		
			16	**16**
			Total: 133 ½ CREDITS	

Note: There is a $125 Clinical Year Fee charged for each semester of senior year to cover University administrative cost. The student is not, however, charged University tuition for the credits earned in senior year. Some hospitals may charge their own fees. The department has an outstanding record in having its students accepted into medical-technology programs. It should be clear, however, that admission to clinical education is competitive and dependent on the student's academic record and success in the interview. The hospital is responsible for selection. A delay in beginning the clinical education may delay a student's graduation. Credits for senior-year courses vary from 28 to 32, depending on the hospital. Course titles in that year may also vary.

In cases where a student withdraws from a chemistry lecture course, the student must also withdraw from the corresponding laboratory course unless a written waiver is provided by the department.

C/CJ 200 Staff
Forensic Science 3 credits
Designed for law-enforcement majors as well as science majors, this is a study of the rules of evidence and the position of the expert scientific witness in law, followed by a review of the uses of scientific, and particularly chemical, evidence in various phases of the investigation and trial of criminal actions.

CHEM 100 Staff
(E)Elements of Chemistry 3 credits
An elementary study of the field of chemistry for the non-science major; concepts of structure, states of matter, modern developments, implications of the field for modern society. Three hours lecture.

CHEM 104 Staff
(E)Science and Society 3 credits
A study of some current problems of a scientific and technological nature from the point of view of the non-science major. Scientific background will be provided to lead to greater understanding and possible solutions. Possible topics: energy, genetic engineering, narcotics, pesticides, etc. Three hours lecture.

CHEM 110-111 Staff
(E)Introductory Chemistry 6 credits
A study of the fundamental concepts of general chemistry, organic chemistry, and biochemistry. Three hours lecture each semester.

CHEM 110L-111L Staff
Introductory Chemistry Laboratory 2 credits
(Lecture is required as pre- or co-requisite; CHEM 110L is prerequisite for CHEM 111L) Experiments dealing with principles of general, organic and biological chemistry are performed. Two hours laboratory each semester.

CHEM 112-113 Staff
(E)General and Analytical Chemistry 6 credits
A study of the laws, theories and principles of general chemistry together with qualitative and quantitative analysis. Three hours lecture each semester.

CHEM 112L-113L Staff
General and Analytical Chemistry Laboratory 3 credits
(Lecture is required as pre- or co-requisite; CHEM 112L is prerequisite for CHEM 113L) Experiments involve semi-micro techniques for qualitative and quantitative analysis (gravimetric and volumetric analysis). Three hours laboratory each semester.

CHEM 114L Staff
General Analytical Chemistry Laboratory 2 credits
A special laboratory course for those students who are advanced in chemistry. The laboratory work covers semi-micro techniques of gravimetric and volumetric quantitative analysis. Admission will be on the basis of a placement exam and the professor's permission. Four hours laboratory. Note: For students with majors in the Chemistry and Biology departments, this course will satisfy the requirements for the CHEM 112-113 laboratory courses.

CHEM 202 Dr. Dickneider
Global Change 3 credits
An application of earth-system science to the problems of global environmental change. This course examines the record of past changes in climate, land-mass distribution, and atmospheric and oceanic composition through an evaluation of the causes of rapid formations, fossils, and tree-ring data. The potential for future change and human impact on the environment, including global warming, is discussed in terms of the earth's paleoclimatological record.

CHEM 232-233 Staff
(E)Organic Chemistry 6 credits
(Prerequisites: CHEM 112-113) An introduction to the chemistry of the principal aliphatic and aromatic compounds of carbon and their derivatives. Three hours lecture each semester.

CHEM 232L-233L Staff
Organic Chemistry Laboratory 3 credits
(Lecture is required as pre- or co-requisite; CHEM 232L is prerequisite for CHEM 233L) Investigation of the chemical preparations and syntheses of major organic functional groups. Three hours laboratory each semester.

CHEM 240 Dr. Marx
Inorganic Chemistry 3 credits
(Prerequisite: CHEM 113) Descriptive chemistry of main group and selected transition elements and their compounds correlated with the periodic table, physical properties, atomic and molecular structure.

CHEM 320 Dr. Dickneider
Industrial Chemistry 3 credits
A review of chemical operations and unit or batch processes common to industry. Econometric analysis involving supply-demand, productivity, commodity prices and costing is an important area covered, as are measures of productivity and patent activity. Three hours lecture.

CHEM 330 Dr. Dickneider
Organic Chemistry III 2 credits
(Prerequisites: CHEM 232-233) A continuation of Chemistry 232-233, emphasizing the study of the major types of organic mechanisms. Two hours lecture.

CHEM 330L Staff
Organic Chemistry III 1.5 - 3 credits
(Lecture is required as pre- or co-requisite) Experiments involve advanced techniques in synthesis and characterization of organic compounds. Six hours laboratory for Chemistry majors and three hours laboratory for Biochemistry majors.

CHEM 340 Dr. Cann
Environmental Chemistry 3 credits
(Prerequisites: CHEM 232-233) A study of chemicals in the environment including their origin, transport, reactions, and toxicity in soil, water, air and living systems.

CHEM 342 Staff
Environmental Toxicology 3 credits
(Prerequisites: CHEM 232-233, BIOL 141-142) This course will encompass several realms of environmental toxicology, including general toxicological theory, effects of contaminants on various biological systems, and discussion of environmental toxicological issues (i.e., specific case studies as well as the types of analyses used in these types of studies).

CHEM 344 Dr. Dickneider
Environmental Geochemistry 3 credits
(Prerequisites: CHEM 232-233) A consideration of the natural cycles (carbon, sulfur, oxygen, water, etc.) that govern the chemistry of our planet. Also considered will be the origins of the elements and the origin, paleohistory, and composition of the planet itself. The effect of man's activities in natural-resource use, ozone depletion, greenhouse-gas production, and fossil-fuel production and use will be examined in detail, with particular attention to their effects on the state of the oceans and the atmosphere.

CHEM 350 Dr. Wasilewski
General Biochemistry I 3 credits
(Prerequisite: CHEM 233) An introduction to the study of biochemistry. A study of the chemical nature of lipids, carbohydrates, proteins, nucleic acids and enzymes, including relationships among vitamins, hormones, and inorganic compounds. Three hours lecture. Successful completion of CHEM 350 precludes credit for CHEM 450.

CHEM 351 Dr. Wasilewski
General Biochemistry II 3 credits
(Prerequisite: CHEM 350) An introduction to the study of the metabolism of carbohydrates, lipids, amino acids, and proteins, including energy transformations and the role of enzyme systems in the above processes. Three hours lecture. Successful completion of CHEM 351 precludes credit for CHEM 451.

CHEM 352 Dr. Foley
Chemical Toxicology 3 credits
(Prerequisite: CHEM 233) The nature, mode of action and methods of counteracting substances which have an adverse effect on biological systems, especially human. Medical, industrial and environmental forensic aspects will be discussed. Three hours lecture.

CHEM 360 Dr. Baumann
Biophysical Chemistry I 3 credits
(Prerequisites: CHEM 232-233) An introduction to the application of physical-chemical principles to biological problems. This involves aqueous solutions, colloidal chemistry, thermodynamics, electro-chemistry, chemical kinetics and nuclear chemistry. Three hours lecture.

CHEM 361 Dr.Baumann
Biophysical Chemistry II 3 Credits
(Prerequisite CHEM 360) A continuation of Biophysical Chemistry I involving a study of atomic and molecular structure, spectroscopy, photo-chemistry, and surface chemistry with applications to biological and biochemical phenomena. Three hours lecture.

CHEM 360L-361L Staff
Biophysical Chemistry Laboratory 3 Credits
(Lecture is required as pre- or co-requisite; CHEM 360L is prerequisite for CHEM 361L) Experiments involve applications of physical-chemical techniques to biological problems. Three hours laboratory each semester.

CHEM 362-363 Dr. Baumann
Physical Chemistry I - II 6 credits
(Prerequisites: CHEM 113, MATH 222) A study of the physical-chemical properties of matter and the dynamics of chemical reactions. Three hours lecture each semester.

CHEM 362L-363L Staff
(W)Physical Chemistry Laboratory 3 credits
(Lecture is pre- or co-requisite; CHEM 362L is prerequisite for CHEM 363L) Experiments demonstrate physical-chemical properties of matter and reactions. Three hours laboratory each semester.

CHEM 370 Drs.Vinson, Rusak
Instrumental Analysis 2 credits
(Prerequisite: CHEM 360 or 362) Instrumental methods of analysis consisting of theory and application of such instrumental techniques as spectroscopy, polarography, and instrumental titrimetry. Two hours lecture.

CHEM 370L Staff
Instrumental Analysis Laboratory 3 credits
(Lecture is required as pre- or co-requisite) Experiments involve application of modern chemical instrumentation and techniques to quantitative analysis. Six hours laboratory.

CHEM 384 Staff
Special Topics in Chemistry 2-4 credits
Study of selected topics in chemistry and biochemistry, depending on student and faculty interest and the current state of the science. It may include topics from inorganic chemistry, organic chemistry, physical chemistry, analytical chemistry, polymer chemistry and interdisciplinary topics.

CHEM 390 Staff
Chemical Literature and Writing 1 credit
A study of the published source material of chemical science and industry. The course includes practical instruction in library technique and in the written reporting of results. One hour lecture.

CHEM 391 Staff
Seminar 1 credit
Current topics in chemistry, biochemistry, and industrial chemistry are prepared and presented by the students.

CHEM 440 Dr. Marx
Advanced Inorganic Chemistry 3 credits
(Prerequisites: CHEM 362-363 or 360-361) Theoretical concepts and their application to the reactions and structure of inorganic compounds. Coordination chemistry and related topics, physical methods and reaction mechanisms. Three hours lecture.

CHEM 440L Staff
Advanced Inorganic Chemistry Laboratory 3 credits
(Lecture is required as pre- or co-requisite) Laboratory methods involving synthesis and characterization of inorganic compounds are developed. Three hours laboratory.

CHEM 450 Dr. Foley
(W)Biochemistry I 3 credits
(Pre- or co-requisites: CHEM 233 and 360 or 362) Structure-function relationships with emphasis on the organic and biophysical characteristics of proteins, lipids and carbohydrates are described. Enzyme mechanisms and kinetics and the thermodynamic basis of intermediary metabolism are major themes. Three hours lecture. CHEM 450L Lab is required of Biochemistry majors. Successful completion of CHEM 450 precludes credit for CHEM 350.

CHEM 450L Staff
(W)Biochemistry Laboratory 3 credits
(Lecture is required as pre- or co-requisite) Experiments involve techniques used in characterization of biopolymers and study of enzyme kinetics.

CHEM 451 Dr. Foley
Biochemistry II 3 credits
(Prerequisite: CHEM 450) The discussion of intermediary metabolism is continued from CHEM 450 with emphasis on lipid protein and nucleic acid metabolism. Chemical aspects of molecular biology, including DNA replication, gene regulation and protein biosynthesis are included. Three hours lecture. Successful completion of CHEM 451 precludes credit for CHEM 351.

CHEM 452 Dr. Wasilewski
Enzymology 3 credits
A course in the chemical nature of enzymes with relation to mechanism of enzyme action and kinetics, purification and identification of enzymes and isoenzymes, biochemical and physiological aspects of enzymes in living systems. Three hours lecture.

CHEM 460 Staff
Physical Chemistry III 3 credits
(Prerequisite: CHEM 363) Quantum mechanics and quantum chemistry, including classical problems, perturbational theory, variational theory and specific applications of molecular orbital theory to organic molecules and spectroscopic applications.

CHEM 464 Dr. Narsavage-Heald
Polymer Chemistry 3 credits
(Co-requisites: CHEM 330, CHEM 361 or 363) Survey of preparative methods for polymers; characterization of polymers using physico-chemical methods, spectroscopy, and thermal analysis; structure-property relationships; and applications of polymers. Three hours lecture.

CHEM 464L Dr. Narsavage-Heald
Polymer Chemistry Laboratory 1.5 credits
(Pre- or co-requisites: CHEM 330, CHEM 464) Laboratory experiments investigate synthesis and characterization methods for polymers, structure-property effects, and thermal analysis of polymers. Three hours laboratory.

CHEM 493-494 Staff
(W)Undergraduate Research 3 credits
(Prerequisites: CHEM 233, 360 or 362, 390) Individual study and research in connection with a specific chemistry or biochemistry problem. Results must be written as a thesis and defended before the department. 1.5 credits each semester.

NSCI 103 Dr. Vinson
(E,W)The Ascent of Man 3 credits
Science and technology from the ancient Greeks to the present will be discussed from the personal viewpoint of the scientists and inventors. Lectures will be supplemented by films, demonstrations, and field trips. Three hours lecture.

COMMUNICATION

PROF. EDWARD F. WARNER, Chairperson

The Department of Communication embraces the fields of broadcasting (radio and television), cable, film, journalism, advertising, public relations, and speech. Although the media are interrelated, students may concentrate in one of these fields. Some students, however, will seek a mixture or subspecialty which combines study in several Communication areas. The department will adapt each student's curriculum to his or her goals, and for this reason individual student advising by the Communication faculty is a high priority.

Students who major in Communication become knowledgeable about the subject matter from both humanistic and scientific perspectives. They also have several opportunities to acquire on-the-job experiences through departmental internships, as well as individualized study available through faculty-directed projects and theses. A Communication degree program prepares students for professional careers and advanced studies. In addition, courses are designed to serve students in other departments of the University by developing their oral and written communication skills.

A student wishing to earn a B.A. degree in Communication must satisfactorily complete a minimum of 36 semester hours from the Department of Communication course offerings. Included among these 36 hours are five core courses which are required for all Communication majors.

DEGREE OFEERINGS AND REQUIREMENTS

A minimum of 36 hours in Communication subjects, including the following five required core courses:

COMM	115	Writing for Communication
COMM	210	Logical and Rhetorical Communication
COMM	215	Introduction to Communication Theory
COMM	316	Communication Ethics
COMM	415	Senior Seminar

MINOR. A student wishing to minor in Communication must satisfactorily complete 18 hours to be selected with the approval of the department chair. Nine of these hours must come from the following three options:

1)	either	COMM 110	Interpersonal Communication
	or	COMM 120	Mass Communication
2)	either	COMM 210	Logical and Rhetorical Analysis
	or	COMM 316	Communication Ethics
3)	either	COMM 215	Introduction to Communication Theory
	or	COMM 415	Senior Seminar

(COMM 100 and COMM 484 do not count toward the minor.)

Majors are required to select a track or area of study:

Advertising
Communication Studies
Film Studies
Journalism
Public Relations
Radio/TV Production

Each track has two required courses. The remaining Communication elective courses can be from the declared track or from the other tracks. Courses required in a specific track are identified by an asterisk. The cognate in communication must consist of eight courses in the same academic area which will contribute to the student's preparation for work in the declared track.

Advertising
- COMM 120 Mass Communication
- * COMM 225 Advertising
- COMM 227 Contemporary Public Relations
- * COMM 325 Advertising Copywriting
- COMM 326 Political Advertising
- COMM 329 Graphics
- COMM 380 Advertising Practicum

Communication Studies
- * COMM 110 Interpersonal Communication
- COMM 211 Argumentation and Debate
- * COMM 214 Small Group Communication
- COMM 228 Intercultural Communication
- COMM 229 Gender and Communication
- COMM 312 Organizational Communication
- COMM 411 Persuasion and Propaganda

Film
- COMM 120 Mass Communication
- * COMM 232 Film History
- COMM 332 Documentary Film
- * COMM 432 Film Theory and Criticism
- COMM 427 International Film

Journalism
- COMM 120 Mass Communication
- COMM 223 Radio Journalism
- * COMM 224 Newswriting
- COMM 323 Television Journalism
- COMM 324 Computer Assisted Reporting
- * COMM 328 News Editing
- COMM 329 Graphics

Public Relations
- COMM 120 Mass Communication
- COMM 225 Advertising
- * COMM 226 Strategic Writing for PR
- * COMM 227 Contemporary Public Relations
- COMM 327 Cases in Strategic PR
- COMM 329 Graphics

Radio/TV Production COMM 120 Mass Communication
- * COMM 221 Radio Production
- * COMM 222 Television Production
- COMM 310 Mass Communication Law
- COMM 317 Digital Audio/Video Production
- COMM 321 Advanced Radio Production
- COMM 322 Advanced TV Production
- COMM 422 Educational Television
- COMM 480 Television Practicum

COMMUNICATION

	Dept. and No.	Descriptive Course Title	Credits FALL	SPRING
		FIRST YEAR		
MAJOR	COMM ELECT-COMM 115	Communication Elective — Writing for Communication	3	3
COGNATE	COGNATE ELECT	Cognate Elective		3
GE WRTG/SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy/Theology I	3	3
GE FSEM-PHED	INTD 100-PHED	Freshman Seminar-Physical Education	1	1
			16	**16**
		SECOND YEAR		
MAJOR	COMM 210	Logical and Rhetorical Analysis	3	
MAJOR	COMM 215	Communication Theory		3
MAJOR	COMM ELECT	Communication Electives	3	3
COGNATE	COGNATE ELECT	Cognate Electives	3	3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics/Theology II	3	3
GE QUAN-S/BH	QUAN-S/BH ELECT	Quantitative-Social/Behaviorial Elective	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
		THIRD YEAR		
MAJOR	COMM 310-ELECT	Mass Communication Law-Comm. Elective	3	3
MAJOR	COMM ELECT	Communication Electives	3	3
COGNATE	COGNATE ELECT	Cognate Electives	3	3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Electives	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE ELECT	FREE ELECT	Free Electives	3	3
			18	**18**
		FOURTH YEAR		
MAJOR	COMM 415	Senior Seminar	3	
MAJOR	MAJOR ELECT	Communication Elective		3
COGNATE	ELECT	Cognate Electives	3	6
GE HUMN-S/BH	HUMN-S/BH ELECT	Humanities-Social/Behavioral Electives	3	3
GE ELECT	ELECT	Free Electives	6	3
			15	**15**

Total: 130 CREDITS

COMM 100 Staff
Public Speaking 3 credits
This is a performance class which emphasizes the theory, composition, delivery, and criticism of speeches. Successful completion of COMM 100 (with a grade of C or better) fulfills the speech skills requirement of the University.

COMM 110 Staff
Interpersonal Communication 3 credits
An investigation and analysis of the process and nature of human communication and its intrapersonal and interpersonal attributes.

COMM 115 Staff
Writing for Communication 3 credits
(Prerequisite: WRTG 107 or fulfillment of Writing Skills requirement) An introduction to the major forms of writing for communication professions: corporate, print, radio/television production, public relations, and advertising. Students will focus on the development and improvement of writing, research and critical thinking skills.

COMM 120 Staff
Mass Communication 3 credits
Historical survey of the nature, scope, and function of the print and electronic media in the United States. Economics, programming, and public control are some of the topics covered.

COMM 210 Staff
(W)Logical and Rhetorical Analysis 3 credits
A study of the principles of logic and persuasion, analysis of fallacies, and critical examination of the principles of structure in written and oral communication. Practice in briefs and abstracts with an emphasis on precision and clarity.

COMM 211 Staff
Argumentation and Debate 3 credits
This course concentrates on the techniques of argumentation, persuasion, debate, and forensics. Focuses heavily on research, case construction, and formal analysis.

COMM 214 Staff
Small-Group Communication 3 credits
An examination of research, techniques, and principles of small-group communication. Topics include problem-solving, decision-making, conflict-resolution, leadership theories, interaction strategies, and participant roles.

COMM 215 Staff
Introduction to Communication Theory 3 credits
An examination of theories that describe, explain and/or predict human communication behavior in the contexts of interpersonal, small group, public, organizational, mass media, intercultural and gender.

COMM 221 Staff
Radio Production 3 credits
An examination of the dynamic industry roles of the radio producer/director. Areas to be studied include production theory and techniques which apply to station and program promotions, advertising, news, and music formats.

COMM 222 Staff
Television Production 3 credits
Designed to provide both theoretical background and practical application of television production in and outside the studio. Various format types, production techniques, and artistic styles are studied. Opportunity for producing and directing television programs.

COMM 223 Staff
Radio Journalism 3 credits
(Prerequisite: COMM 221 or COMM 224 or COMM 328) With a focus on gathering and preparing news for broadcast (concentrating especially on interviewing techniques), this class will investigate various news formats and styles. At the mid-semester point, the class will begin operating as a news team.

COMM 224 Staff
(W) Newswriting 3 credits
Evaluating news, reporting, and writing stories. Newsroom organization. Style and usage. Interviewing, feature writing. Students work at Macintosh computer terminals. Typing ability needed.

COMM 225 Staff
Advertising 3 credits
This course explores advertising as an institution in society, utilizing research, media planning, and creative strategies. Students will participate in the formulation of an advertising campaign plan for local businesses.

COMM 226 Staff
Strategic Writing for Public Relations 3 credits
(Formerly Writing for Public Relations) Writing and editing of public relations and marketing communication materials such as press releases, speeches, direct mail, brochures, newsletter and web sites. Writing and editing for electronic media and video news. Emphasis on integrated communications.

COMM 227 Staff
Contemporary Public Relations 3 credits
(Formerly Public Relations) Principles of the professional practice of modern public relations. Concepts of planning and executing effective communication strategies including message design and distribution for any organization.

COMM 228 Staff
(D)Intercultural Communication 3 credits
Designed to provide a framework for understanding diversity in communication patterns among cultures and co-cultures. Topics include high- and low-context patterns, verbal and nonverbal communication across cultures and co-cultures, persuasion, dialects, organization of verbal codes, and the structure of conversations.

COMM 229 Staff
(D)Gender and Communication 3 credits
This course examines the theory and research in communication that deal with gender differences and gender stereotyping. Experiential learning techniques give students the opportunity to examine how issues of gender communication impact their lives. Areas to be addressed include: language usage; nonverbal communication; mass-media effects; organizational communication; interpersonal communication and intimacy.

COMM 232 Staff
Film History 3 credits
This course will trace the evolution of filmmaking from its earliest experimental stages to the modern feature film of today. The course will concentrate on the American film industry, its audience impact as a mass medium, and the genres of films which have evolved over the years. Selected screenings will reveal the transitions and refinements which characterize the medium of film.

COMM 310 Staff
Mass Communication Law 3 credits
(Prerequisites: COMM 110, 120, 210, 220, junior or senior standing) Analysis and examination of statutory laws, congressional legislation, and federal rules and regulations governing the mass media in the United States. Focus on the First Amendment, libel and slander, privacy, copyright, free press/fair trial, obscenity, advertising, antitrust and monopoly, taxation, and licensing.

COMM 311 Staff
Political Communication 3 credits
The study of rhetorical strategies used by the modern politician. Examination of American political rhetoric as well as rhetorical styles operative in foreign-policy activities.

COMM 312 Staff
Organizational Communication 3 credits
The study of communication behaviors, patterns, and strategies in organizations. Topics include power and politics, organizational cultures, human resources, conflict management, and negotiation. Historical and contemporary theories of organizing are examined and critiqued from a communication perspective.

COMM 313 Staff
Nonverbal Communication 3 credits
A study of the nonverbal aspects of human interaction. Topics include impression management, social influence, form and function in design, proxemics, kinesics, and the symbolic environment.

COMM 314 Staff
Legal Communication 3 credits
An examination of specific skills needed to promote effective and meaningful communication by the legal professional and the interface with clients, juries, judges, and the non-legal public.

COMM 316 Staff
Communications Ethics 3 credits
(Formerly Responsibility in Communication) This course will consider the need for and applications of proper standards by those in today's media. It will also focus on the media responsibility to be aware of the public they serve. Different faculty may approach this course from various ethical/humanistic perspectives.

COMM 317 Staff
Digital Audio and Video Production 3 credits
This course will provide an introduction to producing audio and video content for new technologies such as the Web and

digital publication formats. Students will use digital recording and editing equipment to produce projects suitable for new technologies.

COMM 318 Staff
Multi-Media Presentations 3 credits
(Prerequisite: COMM 317) This course focuses on the principles and practices of speaker delivery style when using multimedia to present a message. Message construction and audience analysis will also be emphasized.

COMM 321 Staff
Advanced Radio Production 3 credits
(Prerequisite: COMM 221) Building upon the foundation acquired in COMM 221, students generate specialized projects of their own design. Then, working with the instructor and professionals from the radio industry, students produce and direct complete programs for broadcast.

COMM 322 Staff
Advanced Television Production 3 credits
(Prerequisite: COMM 222) Building upon the foundation acquired in COMM. 222, students pursue specialized projects in producing and directing programs for broadcast or cable distribution.

COMM 323 Staff
Television Journalism 3 credits
(Prerequisite: COMM 224 or COMM 328) Broadcast-journalism skills are refined ithrough classroom and outside assignments. Production techniques, including tape editing, are explored. Television news formats are produced.

COMM 324 Staff
(W) Advanced Newswriting 3 credits
(Prerequisite: COMM 224) Intensive training and practice in techniques of reporting and writing news stories and in covering public affairs. Familiarity with journalistic basics, style, and computer terminal operations required.

COMM 325 Staff
Advertising Copywriting 3 credits
Students develop two separate creative campaign strategies for hypothetical clients of their own choosing. For these large-budget accounts, students must create copy for newspapers, magazines, broadcast, and direct mail, all with a consistent campaign theme.

COMM 326 Staff
Political Advertising 3 credits
Critical examination of rhetorical strategies used in twentieth-century political campaigning. Case studies and student projects focus on the special uses of broadcast and print media in political advertising.

COMM 327 Staff
Cases in Strategic Public-Relations 3 credits
(Formerly Public Relations Cases) Case studies focusing on the problems and challenges faced by a variety of organizations. Practical application of creative problem-solving, theory and research in actual organizations.

COMM 328 Staff
News Editing 3 credits
(Prerequisite: COMM 224) Preparing copy for publication. Correcting, improving and trimming stories. Headline writing, layout, graphics. Wire services, printing process.

COMM 329 Staff
Graphics 3 credits
Visual aspects of print media. Typography, printing presses, handling photos and other art layout and design, introduction to desktop publishing. Familiarity with journalism basics, style, and computer-terminal operations required.

COMM 331 Staff
Mass-Media Management 3 credits
(Prerequisite: COMM 120 or COMM 220) The multi-faceted roles of managers in the various communication industries are examined. Special attention is given to technical, conceptual and humanistic concerns. Specific areas of study include management of self and personal relations, unions and contracts, community relations, audience analysis and measurement.

COMM 332 Staff
Documentary Film 3 credits
This course traces the growth, development, and influence of American and foreign nonfiction films, particularly their various functions as propaganda, public service and promotion, education, entertainment, and art.

COMM 334 Staff
Broadcast Programming 3 credits
Study of programming strategies, practices, and operations of commercial radio and television stations. Topics include audience research, program acquisitions, scheduling, formats, syndication, promotion, and network-affiliate relationships.

COMM 380 Staff
Advertising Practicum 3 credits
(Prerequisite: COMM 225 or COMM 325) Students function as a full-service advertising agency which provides clients with a complete array of services ranging from campaign creation to implementation and evaluation.

COMM 411 Staff
Persuasion and Propaganda 3 credits
An in-depth examination of the theoretical foundations and practical applications of those factors which influence the persuasibility of target audiences. Topics include attitudes, beliefs, values, behaviors, appeals and reference groups.

COMM 415 Staff
Senior Seminar 3 credits
(Prerequisite: Senior standing) This capstone course will synthesize course work to prepare students for entry into the profession of communication. Emphasis will be placed on the application of Jesuit ideals to the identification and approaches that concerns today's communication industry.

COMM 416 Staff
Philosophy of Communication 3 credits
A general study of the forces and dynamics which articulate the phenomenon of human communication by an examination of the human capacity to comprehend and realize fulfillment or wholeness through communication.

COMM 422 Staff
Educational Television 3 credits
Instructional uses of the television medium by public television stations, schools, closed-circuit and cable systems. Types of educational programs are evaluated. Students work on preparing projects which may reflect their own pedagogical interests.

COMM 425 Staff
Cable Television 3 credits
A study of cable television and its development and current place in the telecommunications industry. Topics include programming strategies, formats, multiple-system operators, independents, syndication, sales, satellite services, pay-per-view, audience ratings, management and the franchising process. Students develop their own research proposals for establishing new cable channels, networks and services.

COMM 426 Staff
International Broadcasting 3 credits
Comparative analysis of national and international media systems throughout the world. Emphasis on their origin, development, and operation.

COMM 427 Staff
International Film 3 credits
An investigation of the major contributions and movements of various nations in the development and evolution of film as a multi-national and global industry.

COMM 432 Staff
Film Theory and Criticism 3 credits
Critical examination of the major theoretical and analytical explanations of film's effectiveness as an artistic form of communication. The work of classical, contemporary and experimental film scholars will be studied, and selected films depicting their observations will be screened. Film analysis and criticism projects will be designed by students.

COMM 433 Staff
Television Criticism 3 credits
Analysis of radio and television programs and promotional strategies, including formats, scripts, talent, commercials, public-service announcements, positioning, ratings, and network-affiliate relationships.

COMM 480 Staff
Television Practicum 3 credits
(Prerequisites: COMM 222, COMM 322) Communication Seniors undertake significant areas of study resulting in a broadcast-quality videotape or audiotape suitable for airing by commercial or non-commercial television stations, radio stations or cable systems.

COMM 481 Staff
Internship 3 credits
(Prerequisites: junior or senior standing, plus appropriate course work, and faculty approval) Highly recommended for every major, although not required, this on-the-job experience is guided by practitioners in the communication field and supervised individually by a faculty member in consultation with the student's advisor and the department chair. An additional 3 credits can be earned—for a maximum of 6 credits—by petition to the Communication Department. (Internship credits cannot be used to fulfill requirements in the COMM major, minor, or cognate; they can be used in the elective area.) See internship director.

COMM 482 Staff
Directed Independent Study 3 credits
(Prerequisite: senior standing) In consultation with the student's advisor and department chair, the Communication Senior undertakes a significant area of study resulting in a major research paper. Students select a Communication professor whom they wish to direct the study. Usually taken to augment an area of the student's interest not substantially covered in available departmental courses.

COMM 484 Staff
Special Topics 3 credits
In-depth departmental seminars on selected communication topics meeting the needs and interests of students. Topics vary from semester to semester.

COMM 499 Staff
Senior Thesis 3 credits
(Prerequisites: COMM 310, 410) An optional research-based written project in which the serious Communication senior, in consultation with the student's advisor and department chair, selects an issue or problem for scholarly study, undertakes significant and meaningful research, and produces a major paper of publishable quality. Students select a Communication professor whom they wish to direct their thesis. Strongly recommended for students who plan to attend graduate school.

COMPUTING SCIENCES

PROF. RICHARD M. PLISHKA, Chairperson

The University of Scranton's Bachelor of Science program in Computer Science dates from 1970 – one of the oldest in the Commonwealth of Pennsylvania. The Computer Science Program is accredited by the Computing Commission of ABET, 111 Market Pl., Suite 1050, Baltimore, MD. 21202-4012 — telephone: 410-347-7700. The Computer Science major provides an integrated introduction to Software Engineering along with the mathematical skills needed in Computer Science. The program culminates in the senior year with the Computer Projects course. Research and internship opportunities are available. The Computing Sciences department may be reached on the World Wide Web at http://www.cs.scranton.edu.

COMPUTER SCIENCE

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FIRST YEAR		
MAJOR	CMPS 134-144	Computer Science I-II	3	4
COGNATE	MATH 114	Analysis I		4
GE WRTG-SPCH	WRTG 107 - COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE PHIL	PHIL 120	Introduction to Philosophy	3	
GE T/RS	T/RS 121	Theology I		3
GE HUMN	HUMN ELECT	Humanities Elective		3
GE QUANT	MATH 142	Discrete Structures	4	
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			17	**18**
		SECOND YEAR		
MAJOR	CMPS 240-250	Data Structures/Machine Org.	3	3
MAJOR	CMPS 260	Theoretical Foundations		3
COGNATE	MATH 221-351	Analysis II-Linear Algebra	4	3
GE NSCI	PHYS 140-141	Elements of Physics I-II	4	4
GE PHIL	PHIL 210	Ethics	3	
GE T/RS	T/RS 122	Theology II		3
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE PHED	PHED ELECT	Physical Education	1	1
			18	**17**
		THIRD YEAR		
MAJOR	CMPS 352-344	Operating Systems-Program Lang.	3	3
MAJOR	CMPS 340-ELECT 1	File Processing-Elective	4	3
MAJOR	CMPS 350-374	Comp. Architecture-Software Eng.	3	3
COGNATE	MATH 310	Applied Probability & Statistics	4	
COGNATE	COGNATE[2]	Cognate Elective		3
GE S/BH	S/BH ELECT	Social/Behavioral Elective	3	
GE ELECT	ELECT	Free Elective		3
			17	**15**
		FOURTH YEAR		
MAJOR	CMPS 490	Computer Projects	3	
MAJOR	CMPS ELECT [1]	Major Electives		6
COGNATE	COGNATE[2]	Cognate Elective	3	
GE PHIL	PHIL 214	Computers and Ethics		3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE S/BH	S/BH ELECT	Social/Behavioral Elective	3	
GE ELECT	ELECT	Free Electives	3	3
			15	**15**
			Total: 132 CREDITS	

[1] The three electives in the major must be chosen from CMPS 341, 354, 356, 358, 360, 362, 364, 370, 372, 376, 384, 393 and 481.

[2] At least 4 credits must be courses in the natural sciences for science majors which enhance the student's ability in the application of the scientific method. See departmental advisor for acceptable courses.

MINOR: To minor in Computer Science, the student must take a minimum of 20 hours including CMPS 134, Math 142, CMPS 144, CMPS 240 and any two of CMPS 250, 260, 340, 344, 350, 352, 356, 360, 364, 370, 372, 374 or 384.

COMPUTER INFORMATION SYSTEMS

This program investigates the analysis, design, development, implementation, evaluation and effective use of computer information systems in organizations. Since business and government are principal users of computers, CIS majors will select cognate courses in business. Students are encouraged to participate in an internship.

COMPUTER INFORMATION SYSTEMS

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR	CMPS 134-144	Computer Science I-II	3	4
GE QUAN/COGNATE	MATH 142-114	Discrete Structures-Analysis I	4	4
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE WRTG-SPCH	WRTG 107-COMM 100	Compositon-Public Speaking	3	3
GE PHIL-T/RS	PHIL 120-T/RS 121	Intro. to Philosophy-Theology I	3	3
GE HUMN	HUMN ELECT	Humanities Elective		3
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1	1
			17	**18**
		SECOND YEAR		
MAJOR	CMPS 240-250	Data Structures-Machine Org.	3	3
COGNATE	ACC 253-254	Financial & Managerial Acc.	3	3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE S/BH	ECO 153-154	Prin. of Micro.-Macro. Eco.	3	3
GE ELECT	MATH 204 [1]	Statistics		3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
		THIRD YEAR		
MAJOR	CMPS 352-ELECT [2]	Operating Systems-Elective	3	3
MAJOR	CMPS 340-341	File Processing-Database Systems	4	3
MAJOR	CMPS 330-331	Info. Sys.-Sys. Analysis & Design	3	3
COGNATE	MGT 351-352	Principles of Management I & II	3	3
COGNATE	MGT 251	Legal Environment of Business		3
GE NSCI	NSCI ELECT	Natural Science Elective	3	
GE ELECT	ELECT	Free Elective		3
			16	**18**
		FOURTH YEAR		
MAJOR	CMPS 490-ELECT [2]	Computer Projects-Elective	3	6
COGNATE	MKT 351	Intro. Marketing	3	
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE NSCI	NSCI ELECT	Natural Science Elective	3	
GE PHIL	PHIL 214	Computers and Ethics		3
GE ELECT	ELECT	Free Electives	3	3
			15	**15**

Total: 131 CREDITS

[1] or Stat 251

[2] Elective courses in the Computer Information Systems major must be chosen from CMPS 260, 344, 350, 354, 356, 360, 362, 364, 370, 372, 374, 376, 384, 393 and 481.

MINOR: To minor in Computer Information Systems, the student must take a minimum of 18 credits including CMPS 134, 136 or 144, 330, 331 and two of Math 142, CMPS 202 or 312, CMPS 240, 311, 340, 356 or 376.

CMPS 134 Staff
Computer Science I 3 credits
(Prerequisite: none) An introduction to programming concepts and methodology using an appropriate object-oriented programming language (currently Java). Topics include problem analysis, abstraction, modularization, the development and use of algorithms, reuse, and the use or programming constructs including data types, classes, control structures, and methods.

CMPS 136 Staff
Computer Programming II 3 credits
(Prerequisite: CMPS 134) for non-computing majors who want more object-oriented programming experience. Includes data structures, file processing, graphical user interfaces and event-driven programming. May not be used to satisfy the requirements of CMPS OR CIS. May not be taken by a student who has credit for CMPS 144.

CMPS 144 Staff
Computer Science II 3 credits
(Prerequisites: CMPS 134 and MATH 142) This course emphasizes object-oriented software development, addressing both software engineering and programming. Topics include modularization, abstraction, encapsulation/information hiding, software reuse, software testing, classic data abstractions (e.g., lists, trees) and algorithms (e.g., sorting, searching) recursion, program correctness, and basic algorithm analysis.

CMPS 202 Staff
Web Development 3 credits
(Prerequisite: C/IL 102 or equivalent course) A course that covers fundamental aspects of the development of personal, professional, and business resources using Web-development tools. Topics include creating web pages using basic HTML; advanced HTML concepts; frames; JavaScript to enhance Web pages; forms; CGI (common gateway interface); Java classes. Emphasis is on client-side development although server-side issues are discussed. This is a technical course for students who do not necessarily have a technical background. May not be used as part of any major in the Computing Sciences Department.

CMPS 240 Staff
Data Structures and Algorithms 3 credits
(Prerequisite: CMPS 144) An examination of the issues of data representation, algorithm structure, and encapsulation as they pertain to the development of object-oriented software. Abstract data types studied include stacks, queues, binary trees, n-ary trees, and graphs. Various representation alternatives are analyzed and compared, trade-offs frequently encountered by software developers are discussed.

CMPS 250 Staff
Machine Organization and Assembly Language Programming 3 credits
(Prerequisite: CMPS 144) An introductory study of the organization and architecture of computers through an exploration of various virtual machines. Programming at the assembly-language level and interfacing with software components (primarily written in C). Topics include representation of data and instructions, computer arithmetic, memory hierarchies, instruction sets, addressing modes, digital logic, microprogramming, pipelining, and parallel processing.

CMPS 260 Staff
Theoretical Foundations of Computer Science 3 credits
(Prerequisite: CMPS 240) An examination of the fundamental models and concepts of computation — automata, formal languages, and grammars — and how they are related. Church-Turing thesis; recursive and recursively enumerable sets; unsolvable problems; complexity of algorithms; Chomsky hierarchy.

CMPS 311 Staff
Computer Networks and Security 3 credits
(Prerequisite: CMPS 136 or CMPS 144) An introduction to intranets and wide-area networking including operating systems fundamentals, hardware considerations, deployment and administration of networks, security issues, intrusion detection/protection, firewalls, VPN's and encryption. May not be used to satisfy the requirements of the major. May not be taken by a student who has credit for CMPS 354.

CMPS 312 Staff
Web Technology 3 credit hours
(Prerequisites: C/IL 102 or equivalent, COMM 329, CMPS 311) This course covers the fundamental aspects of developing and maintaining Web sites. It provides a thorough coverage of the structure and elements of HTML and JavaScript necessary to create commercial-quality Web sites. Brief coverage will also be given to graphic design and multimedia content. Emphasis will be placed on client-side development although server-side issues will be considered. May not be used as part of any major in the Computing Sciences Department. Cannot be taken by a student who has credit for CMPS 202 or 356.

CMPS 330 Staff
(W) Information Systems Analysis 3 credits
(Prerequisite: C/IL 102/104 or CMPS 134) Introduction to concepts and practices of information processing. Computerized system requirements and techniques in providing appropriate decision-making information to management.

CMPS 331 Staff
Information Systems Development 3 credits
(Prerequisite: CMPS 330) A study of system-development methodology and the role played by the systems analyst in developing user-accepted information systems.

CMPS 340 Staff
File Processing 4 credits
(Prerequisites: CMPS 144 required, CMPS 240 recommended.) File-structures concepts and file-processing applications using an appropriate programming language (currently COBOL). Topics include file maintenance and storage management; file searching, sorting, and merging; cosequential processing; index structures; B-trees; hash tables; indexed sequential files; database concepts.

CMPS 341 Staff
Database Systems 3 credits
(Prerequisites: CMPS 340 required, CMPS 240 recommended) An introduction to database management systems with an emphasis on relational database design and applications. It uses an appropriate database package such as ORACLE or PostgreSQL.

CMPS 344 Staff
Programming Languages 3 credits
(Prerequisite: CMPS 240) A study of programming languages from both the theoretical and practical perspectives. The evolution of languages is reviewed in order to know the design considerations of the past and recognize those of the present. A survey of major and developing paradigms and languages is undertaken which includes use of specific languages to broaden the student's experience. Implementation is studied through an introduction to language translation along with a study of run-time models and interfaces with virtual machines.

CMPS 350 Staff
Computer Architecture 3 credits
(Prerequisite: CMPS 250) A study of the logical structure of computer-system organization including a survey of logic and design with an emphasis on functional components. Topics include instruction sets, hard-wired and micro-programmed control-unit designs, memory systems (caches and virtual memory), I/O systems (interrupts, DMA, and channels). Overview and examples of alternative and advanced computer architectures (pipeline, array processors, multiprocessors).

CMPS 352 Staff
Operating Systems 3 credits
(Prerequisites: CMPS 240, CMPS 250) An introduction to the principles of operating systems. Topics include operating system structure, process management, scheduling and dispatching, process synchronization and interprocess communication, memory management, virtual memory, device management, I/O, and file systems.

CMPS 354 Staff
Data Communications and Networks 3 credits
(Prerequisite: CMPS 352) A study of data communication and networking concepts, including distributed-system architectures, electronic interfaces, data-transmission, data link protocols, terminal networks, computer communication, public-data networks, and local-area networks.

CMPS 356 Staff
Web Programming 3 credits
(Prerequisites: CMPS 240, HTML experience to the level where the students are capable of developing their own web page) This course covers all aspects of programming on the World Wide web. This includes the presentation of HTML, Java, JavaScript and CGI. Topics include advanced HTML (maps, forms, etc.) client-server programming basics as they relate to the web, Java machine concepts, Java/JavaScript similarities and differences, server-side programming, GIF animations, web programming resources and environments.

CMPS 358 Staff
Real-Tme Systems 3 credits
(Prerequisite: CMPS 352) This course covers systems which must interface with the physical world in real-time and whose correctness depends on not only the logical computation but also the time at which the results are produced. Topics include: real-time hardware architectures, real-time operating systems, organization of real-time programs, invoking and managing tasks and processes, coordination and communications among real-time processes, manipulating task priority, concurrent programming, exception handling, software safety, reliability, and fault tolerance.

CMPS 360 Staff
Analysis of Algorithms 3 credits
(Prerequisite: CMPS 240) A survey of methods for designing and analyzing algorithms. Classic algorithms from graph theory, combinatorics and text processing are examined, as are traditional design strategies such as divide-and-conquer, backtracking and dynamic programming. Other topics include NP-completeness and parallel algorithms.

CMPS 362 Staff
Numerical Analysis 3 credits
(Prerequisites: CMPS 134, MATH 222) A survey of numerical methods for solving equations, integration, differentiation, interpolation, differential equations, and linear algebra, and the analysis of error.

CMPS 364 Staff
Theory of Computation 3 credits
(Prerequisite: CMPS 260) The development of a theoretical notion of computability and its relationship to Turing computability and recursive functions; the study of the relationships between automata, formal languages and grammars.

CMPS 370 Staff
Computer Graphics 3 credits
(Prerequisite: CMPS 240) An introduction to the hardware, software, and techniques used to generate graphical representations by computer. Two- and three-dimensional concepts, algorithms, models, and architectures are studied along with examples. An essential aspect of the course involves the development of interactive graphics programs through the use of appropriate application programming interfaces (currently C and the OpenGL API are emphasized). Advanced topics such as animation and various issues related to realistic rendering are explored.

CMPS 372 Staff
Artificial Intelligence 3 credits
(Prerequisite: CMPS 240) Problem solving using expert systems, heuristic programming techniques, tree speed-up techniques, and learning mechanisms.

CMPS 374 Staff
(W) Fundamentals of 3 credits
Software Engineering
(Prerequisite: CMPS 240) An introduction to the concepts of Software Engineering. Stress is placed upon formal models for the design and development of high-quality software. Topics include: project planning, requirements analysis, system design, program design, program implementation, program testing, system testing, system delivery, and maintenance. A group project will be included.

CMPS 376 Staff
Rapid Prototyping 3 credits
(Prerequisite: CMPS 136 or CMPS 144) Some common applications using a database with a visual interface (perhaps Web based) can be successfully created using Rapid Prototyping (a.k.a. Rapid Application Development) This course will cover the synergy of combining a visual language and a relational database employing rigorous design techniques.

CMPS 384 Staff
Special Topics 3 credits each
(Prerequisite: as published) Some recent courses have covered Rapid Prototyping, Real-Time Systems, and Parallel Computing. A syllabus including prequisites is published prior to the registration period for the course.

CMPS 393 Staff
Computer Research 3 credits
(Departmental permission required) A research project carried out by a student under the direction of a faculty member in the department. The results will be prepared in a form suitable for publication. Reader fee.

CMPS 440 Staff
Compiler Design 3 credits
(Prerequisite: CMPS 344) Study of techniques and problems involved in constructing compilers. Lexical analysis, syntax analysis, semantic analysis, symbol-table management, code generation, code optimization.

CMPS 481 Staff
Computer Internship 3 credits
(Departmental permission required) An extensive job experience in computing which carries academic credit. Prior approval is required and information is available on the department Web site.

CMPS 490 Staff
(W)Computer Projects 3 credits
(Prerequisite: Senior standing, departmental premission required) In this course students prepare and present individual computer projects to be evaluated by the instructor and their fellow students.

CRIMINAL JUSTICE

PROF. JOSEPH F. CIMINI, Esq., Chairperson

The Bachelor of Science degree program in Criminal Justice has the following objectives: 1. To prepare students for careers in law enforcement at the local, state or federal levels; 2. To prepare students for careers in the field of correction and rehabilitation: parole, prisons, juvenile delinquency, etc.; 3. To provide students with academic preparation for advanced study in law, criminology, public administration and related fields. The Criminal Justice major is administered by the Department of Sociology/Criminal Justice, which also administers the Sociology and Gerontology degree programs. An advisory board of community leaders working in the field of criminal justice has been established to work with University students, faculty, and administrators.

CRIMINAL JUSTICE

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR	CJ 110-S/CJ 213	Intro. to Crim. Just.-Criminology	3	3
COGNATE	SOC 110	Intro to Sociology	3	
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE PHIL	PHIL 120	Introduction to Philosophy	3	
GE T/RS	T/RS 121	Theology I		3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			16	**16**
		SECOND YEAR		
MAJOR	S/CJ 210	Law and Society	3	
MAJOR	S/CJ 218-S/CJ 220	Amer. Court System-Penology	3	3
MAJOR	S/CJ 212	Criminological Research	3	
GE QUAN	S/CJ 215	Statistics for the Social Sciences		3
GE S/BH	PSYC 110	Fundamentals of Psychology		3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE PHIL	PHIL 210	Ethics	3	
GE T/RS	T/RS 122	Theology II		3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
		THIRD YEAR		
MAJOR	CJ ELECT	Criminal Justice Electives	3	3
COGNATE	SOC 224	American Minority Groups	3	
COGNATE	SOC SCI ELECT[1]	Social Science Electives	3	6
GE S/BH	PS 131	American National Government II		3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE ELECT	ELECT[2]	Free Electives	6	3
			18	**18**
		FOURTH YEAR		
MAJOR	CJ ELECT	Criminal Justice Electives	3	6
MAJOR	CJ 480-481 or ELECT	Internships or Electives	3	3
COGNATE	ELECT[1]	Social Science Electives	3	6
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
GE ELECT	ELECT[2]	Free Elective	3	
			15	**15**

Total: 130 CREDITS

[1] In the cognate, the department recommends PS 135 (State and Local Government); PSYC 225 (Abnormal Psychology); PSYC 224 (Personality); SOC 116 (Community Organization); SOC 118 (Child Welfare); SOC 231 (Urban Sociology); SOC 228 (Social Psychology).

[2] In the elective area, the department strongly recommends ACC 253 (Financial Accounting); ACC 254 (Managerial Accounting); MGT 351 (Principles of Management I), if the student is considering general business as a minor.

MINOR. A minor in Criminal Justice requires eighteen credits. There are three required courses: Soc 110 (Introduction to Sociology), CJ 110 (Introduction to Criminal Justice), and S/CJ 213 (Criminology). The following elective courses are strongly recommended by the department in the Criminal Justice sequence: S/CJ 212 (Criminological Research), S/CJ 214 (Juvenile Delinquency), S/CJ 210 (Law and Society), and CJ 312 (Criminal Law).

CJ 110 Prof. Baker
(S)Introduction to Criminal Justice 3 credits
A foundation course examining problems in the study of crime and criminal justice, basic elements of criminal law and constitutional rights, and the functions of, as well as the relationship between, major components of the criminal-justice system; agencies and role of law enforcement; prosecution; the judicial process, and corrections.

S/CJ 210 Prof. Friedrichs
(S)Law and Society 3 credits
The relationship between law and society, or the interaction of legal and social variables. Examines jurisprudential and social theories of law; development of law; the role of the legal profession; legal behavior and decision-making; and law and social change.

S/CJ 212 Dr. Wolfer
Criminological Research 3 credits
Survey of methods and techniques for achieving interpretable results in research in the criminal-justice field; research design; data collection.

S/CJ 213 Prof. Baker, Prof. Gach
(S)Criminology 3 credits
Crime as a form of deviant behavior; nature and extent of crime; past and present theories; evaluation of prevention, control and treatment programs.

S/CJ 214 Staff
(S)Juvenile Delinquency 3 credits
Nature and extent of delinquency: competing explanatory models and theories; evaluation of prevention, control, and treatment programs.

S/CJ 215 Dr. Wolfer
(Q)Statistics for the Social Sciences 3 credits
An introduction to the statistical techniques used by social scientists to analyze their data. Students learn descriptive and inferential statistics in conjunction with computer usage. Basic skills and procedures are taught for organizing and describing data, for assessing relationships among social variables, and for using this information to make inferences about the population.

S/CJ 218 Prof. Cimini
(S)The American Court System 3 credits
Mindful of the role played by our judiciary in resolving disputes, setting policy, and otherwise having an impact on everyday life, this course provides a basic examination of America's courts in terms of their history and development, their structure and organization, their procedures, people, institutions and issues.

S/CJ 220 Prof. Cimini
Penology: The American Correctional System 3 credits
Analysis and evaluation of contemporary correctional systems; theories of punishment; discussion of recent research concerning the correctional institution and the various field services; the history of corrections in Pennsylvania.

S/CJ 221 Prof. Conlon
Probation and Parole 3 credits
Examination of community treatment in the correctional process; contemporary usage of pre-sentence investigation, selection, supervision, release of probationers and parolees.

S/CJ 224 Prof. Friedrichs
(S, W)Sociology of Deviance 3 credits
Critical examination of theories and empirical studies of social deviance, focusing upon the formulation and application of deviant labels, organizations relating to deviance, and deviant behavioral patterns. Special attention given to noncriminal forms of deviance.

S/CJ 225 Prof. Friedrichs
White-Collar Crime 3 credits
A study of white-collar crime, including corporate misdeeds, political corruption, occupational illegalities and upperworld deviance. This course will explore the causes, consequences, and criminal-justice system response to white-collar crime.

S/CJ 226 Prof. Friedrichs
(S, D) Comparative Justice Systems 3 credits
An exploration of the meaning and character of justice, law and crime in different cultures and countries as well as evolving global standards and patterns of justice, international law, and transnational crime. Specific comparisons are made between Western and Eastern nations, capitalist and socialist systems, and countries with much crime and little crime.

S/CJ 227 Prof. Baker
Organized Crime Patterns 3 credits
The national and international organizational structure of organized crime will be analyzed. Primary attention will be given to comparative theories and concepts. The various methods of prosecution, investigation and control will be discussed.

CJ 230 Prof. Baker
Crime Prevention 3 credits
This course analyzes the basic theories of community policing, problem-solving policing and crime prevention. The emphasis is on primary, secondary and tertiary prevention techniques. Emphasis will be given to the various analytical approaches to the study of criminal profiling, terrorism and methods of planning.

S/CJ 232 Prof. Baker
Public Safety Administration 3 credits
An overview of the public-safety field – its philosophy, disciplines and research. The course will focus on an examination of the police and governmental responses to disaster and accidents. A primary emphasis will be given to the various analytical approaches to the study of terrorism. Methods of planning, investigation and prevention will be discussed.

S/CJ 234 Prof. Baker
Criminal-Justice Management 3 credits
This course surveys major trends in law enforcement including leadership, management, and administration. It includes discussion of police personnel issues, computerized training programs and police health issues. The emphasis is on critical thinking, problem solving and comtemporary policing practices.

CJ 237 Prof. Baker
The Investigative Process 3 credits
This course considers appropriate investigative procedures concerning major criminal investigations. An analysis of specific investigative theories and courtroom applications will be conducted through learning simulation. The homicide court problem will focus on the preservation and admission of evidence.

S/CJ 284 Staff
Special Topics in Criminal Justice 3 credits
(Prerequisite: permission of chairperson and instructor) Courses designed to meet specific needs of individual students or courses offered on a trial basis to determine the value of placing them into the regular curriculum.

CJ 310 Prof. Cimini
Criminal Justice Process 3 credits
A study of the law of criminal procedure, treating investigation and police practices, preliminary proceedings, and trial, as they relate to the development and structure of the American criminal-justice system and as they affect offenders.

CJ 312 Prof. Cimini
Criminal Law 3 credits
A study of substantive criminal law in view of its historical foundations, purpose, functions and limits; of crime and defenses generally; and of the elements which constitute certain specific crimes under state and federal statutes.

S/CJ 314 Prof. Cimini
The Bill of Rights and C.J. 3 credits
From the perspective of the criminal-justice professional, this course addresses key principles enunciated in the first, fourth, fifth, sixth, eighth and fourteenth amendments to *The Constitution of the United States.*

S/CJ 316 Prof. Cimini
Principles of Evidence 3 credits
An examination of the law of evidence as it pertains to the trial of a criminal case. A discussion of the common law, pertinent statutes, judicial opinions, and rules (e.g., *The Federal Rules of Evidence)* as these relate to such concepts as direct and circumstantial evidence; opinion testimony, experts and exhibits; competence, relevance and materiality; privileges, hearsay and its exceptions.

S/CJ 317 Prof. Cimini
Trial, Jury and Counsel 3 credits
A consideration of the rights guaranteed by the Sixth Amendment to *The Constitution of the United States*, surveying constitutional provisions, statutes, court rules, and cases concerning the right of a criminal defendant to a speedy and public trial, to trial by jury, and to the assistance of counsel.

S/CJ 318 Prof. Cimini
Civil Liability 3 credits
An examination of the law-enforcement officer or employee as a defendant in a civil suit arising from the scope of his or her employment. Liability based upon rights statutes is examined, along with consideration of the typical defenses.

S/CJ 324 Prof. Friedrichs
Victimology 3 credits
An examination of the causes and consequences of crime victimization. The recent emergence of the study of the victim, the types and circumstances of victimization, and the nature of the criminal-justice system's response to crime victims are considered, along with the ethical and practical dimensions of crime victimization.

CJ 382-383 Staff
Independent Study 3 credits
in Criminal Justice
(Prerequisite: permission of chairperson and instructor) Directed projects and surveys in criminal justice, law enforcement, and corrections designed to give the student academic flexibility.

CJ 480-481 Prof. Pryle
Internship Experience 3 credits
(Prerequisite: permission of instructor) Supervised experiential learning in an approved criminal-justice setting taken preferably in junior and senior year.

ECONOMICS

DR. SATYAJIT GHOSH, Chairperson

The Arts and Sciences major in Economics offers students a strong general liberal-arts background and at the same time a thorough grounding in the most quantitative of the social sciences. Its major requirements parallel those of The Kania School of Management Economics major (see p. 234), while its cognate provides background in the social sciences. This major is especially appropriate for students intending graduate studies in Economics, or careers in law or government service. Course descriptions for major courses begin on p. 235.

MINOR: 18 credits consisting of ECO 153-154 (or ECO 101, 102); ECO 361-362, plus two upper-level economics courses.

ECONOMICS

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR (GE S/BH)	ECO 153-154	Principles of Micro-Macro Economics	3	3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE PHIL	PHIL 120	Introduction to Philosophy	3	
GE T/RS	T/RS 121	Theology I		3
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE QUAN	MATH ELECT [1]	Math Option	3	3
GE HUMN	HUMN ELECT [2]	Humanities Elective	3	
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1	1
			16	**16**
		SECOND YEAR		
MAJOR	ECO 361-362	Intermediate Micro-Macro Econ.	3	3
MAJOR	STAT 253	Statistics for Economics		3
COGNATE	ACC 253	Financial Accounting	3	
COGNATE	ELECT	Cognate Elective		3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE HUMN	HUMN ELECT	Humn. Electives (HIST 110-111 recom.)	3	3
GE ELECT	ELECT [3]	Free Elective	3	
			18	**18**
		THIRD YEAR		
MAJOR	ECO/IB 351	Environment of International Business		3
MAJOR	ECO 460	Monetary & Fin. Eco.	3	
MAJOR	ECO ELECT	Economics Elective	3	3
COGNATE	FIN 351	Intro. to Finance		3
COGNATE	ELECT [4]	Cognate Electives	3	3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
GE ELECT	ELECT	Free Elective	3	3
			15	**15**
		FOURTH YEAR		
MAJOR	ECO ELECT	Economics Elective	3	
MAJOR	ECO ELECT-ECO 490	Eco. Elective-Seminar	3	3
COGNATE	ELECT [4]	Cognate Electives	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT	Free Electives	3	6
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
			Total: 130 Credits	

[1] See note on Math Options in Undergraduate Catalog, page 224.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

[4] Economics majors may apply up to six cognate credits toward a Math minor. Students taking the sequence open to Math majors are strongly urged to complete the calculus sequence by taking MATH 222, particularly if they plan on pursuing graduate studies.

Economics majors in the College of Arts and Sciences will apply their elective cognate credits to the following areas (exceptions require the permission of the CAS Dean): Political Science, Psychology, Public Administration, Sociology. Nine credits must be in the same field.

ENGINEERING

DR. ROBERT A. SPALLETTA, Director

Engineering is the profession in which a knowledge of the mathematical and natural sciences gained by study, experience, and practice is judiciously applied to develop ways to utilize, economically, the materials and forces of nature for the benefit of mankind. A number of majors are available.

COMPUTER ENGINEERING

The undergraduate Computer Engineering curriculum is broad-based with continually updated content in computers, engineering science, and engineering design. The objectives of this program are to prepare our students for a professional career in computer engineering and to prepare them for advanced study in computer engineering, computer science, or electrical engineering. The technical core of the program emphasizes theoretical and laboratory skills, hardware and software skills, simulation and design.

Students in the Computer Engineering program study basic science, mathematics, computer science, electrical engineering, design, writing, public speaking, and the liberal arts in order to prepare for a professional career or advanced studies. The program includes courses from the programs of Computer Science and Electrical Engineering, providing balanced coverage and integration of the hardware and software aspects of computer systems. The design process is emphasized throughout all four years, and design projects are included in all laboratory courses. The sophomore and junior years include core courses in computer algorithms, digital system design, computer architectures, microprocessor systems, computer interfacing, and programming. These courses provide a foundation for the senior year, which includes electives and an in-depth two-semester design project.

Career opportunities in computer engineering range from computer applications such as computational medicine, oceanic engineering, and office automation to robotics, software engineering systems design, graduate study, reliability and other applications such as neural networks.

COMPUTER ENGINEERING

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FIRST YEAR		
COGNATE	PHYS 140-141	Elements of Physics I-II	4	4
COGNATE	CMPS 134-144	Computer Science I-II	3	4
COGNATE	MATH 142-114	Discrete Structures-Analysis I	4	4
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE WRTG	WRTG 107	Composition		3
GE FSEM	INTD 100	Freshman Seminar	1	
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE PHED	PHED ELECT	Physical Education	1	
			16	**18**
		SECOND YEAR		
MAJOR	E/CE 240-EE 241	Intro. to Computer Engineering I-Circuit Analysis	3	4
COGNATE	PHYS 270	Modern Physics	4	
COGNATE	EE 243L	Digital System Design Lab		2
COGNATE	MATH 221-222	Analysis II-Analysis III	4	4
COGNATE	CMPS 240	Data Structures	3	
MAJOR	CMPS 250	Machine Organization		3
GE PHIL-T/RS	PHIL 120 - 210	Introduction to Philosophy-Ethics	3	3
GE PHED	PHED ELECT	Physical Education	1	
GE SPCH	COMM 100	Public Speaking		3
			18	**19**
		THIRD YEAR		
MAJOR	EE 343-344	Electronic Circuits I-II	5	3
MAJOR	ENGR 350	Applied & Engineering Math	3	
MAJOR	EE 346	Digital Signal Processing		3
MAJOR	CMPS 350 - E/CE 340	Computer Architecture-Digital Systems	3	3
COGNATE	CHEM 112	General and Analytical Chemistry	4½	
GE HUMN	HUMN ELECT	Humanities Elective		3
GE S/BH[1]	S/BH ELECT[1]	Social/Behavioral Electives	3	3
GE PHIL-T/RS	T/RS 121	Theology I		3
			18½	**18**
		FOURTH YEAR		
MAJOR	EE 449	Computer Interfacing	5	
MAJOR	EE 450 - 454	Control Systems-Robotics Design	3	3
MAJOR	CMPS 374	Fundamentals of Software Engineering		3
COGNATE	ENGR 250	Engineering Mechanics-Statics	3	
MAJOR	CMPS 352[2] - 344	Operating Systems-Programming Languages	3	3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
GE PHIL-T/RS	T/RS 122	Theology II	3	
GE HUMN	HUMN ELECT	Humanities Electives		6
GE PHED	PHED ELECT	Physical Education	1	
			18	**18**

Total: 143½ credits

[1] ECO 153 - 154 suggested

[2] Or technical elective in Physics (PHYS 372, 447, 460, 473, 474)

ELECTRONICS-BUSINESS

The state of the business world today is such that a major portion of its administrative effort must be geared to the supervision of persons engaged in complex technological processes often involving applications of electronics. As a consequence, the ideal administrator is now one who is conversant with both good business practice and technological know-how. The Electronics-Business major provides a student with a program of carefully selected business and economics courses coupled with a series of coordinated physics and electrical engineering courses so as to provide preparation for an administrative career in an electronically oriented business enterprise. The program also provides sufficient preparation for further studies leading to the Master's in Business Administration.

ELECTRONICS-BUSINESS

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR (S/BH)	ECO 153-154	Prin. of Micro.-Prin. of Macroeconomics	3	3
COGNATE (GE QUAN)	MATH 103-114 or	Pre-Calc.-Analysis I or	4	4
	MATH 114-221	Analysis I-Analysis II		
COGNATE (GE NSCI)	PHYS 140-141	Elements of Physics I-II	4	4
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE PHIL	PHIL 120	Introduction to Philosophy		3
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1	1
			18	**18**
		SECOND YEAR		
MAJOR	E/CE 240	Introduction to Computer Engineering	4	
MAJOR	EE 241	Circuit Analysis		4
MAJOR	ACC 253-254	Financial, Managerial Accounting	3	3
MAJOR	ENGR 252	Solid State Material Science		3
COGNATE	PHYS 270	Elements of Modern Physics	4	
COGNATE	MATH 221-222 or	Analysis II-III or	4	
	MATH 222-341	Analysis III-Differential Equations		4
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE PHED	PHED ELECT	Physical Education		1
			18	**15**
		THIRD YEAR		
MAJOR	EE 343-344	Electronic Circuits I-II	5	3
MAJOR	STAT 251-252	Statistics for Business I-II	3	3
GE PHIL	PHIL 210	Ethics	3	
GE T/RS	T/RS 121-122	Theology I-II	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
GE PHED	PHED ELECT	Physical Education		1
			17	**16**
		FOURTH YEAR		
MAJOR	MGT 351	Principles of Management I	3	
MAJOR	MKT 351	Introduction to Marketing		3
MAJOR	FIN 351	Introduction to Finance	3	
MAJOR	OIM 352	Introduction to Operations Management		3
MAJOR	OIM 351	Introduction to Management Science	3	
GE HUMN	HUMN ELECT	Humanities Elective		3
GE ELECT	ELECT	Free Electives	6	6
			15	**15**

Total: 132 credits

ELECTRICAL ENGINEERING

The Electrical Engineering major of the Department of Physics/EE prepares the student for the analysis and design of electronic systems and devices whose principal functions are the shaping and control of information. The Department of Physics/EE offers four areas of focus: Computer Engineering, Biomedical Engineering, Optical Engineering, and Environmental Instrumentation Engineering. The specific electives for these areas of focus will be chosen in consultation with the student's academic advisor.

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
COGNATE (GE NSCI)	PHYS 140-141	Elements of Physics I-II	4	4
COGNATE (GE QUAN)	MATH 114-221	Analysis I-II	4	4
GE WRTG-SPCH	WRTG 107- COMM 100	Composition-Public Speaking	3	3
GE C/IL-ELECT	C/IL 102-CMPS 134	Comp. & Info. Lit.-Intro. to CMPS	3	3
GE PHIL-T/RS	PHIL 120-T/RS 121	Intro. to Philosophy-Theology I	3	3
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1	1
			18	**18**
		SECOND YEAR		
MAJOR	E/CE 240-EE241	Intro to Computer Engr.-Circuit Analysis	3	4
MAJOR	EE 243L	Digital System Design Lab		2
COGNATE	ENGR 250-252	Statics- Solid State Materials	3	3
COGNATE	ENGR 253-254	Intro. to CAD-3-D CAD	1	1
COGNATE	PHYS 270	Elements of Modern Physics	4	
COGNATE	MATH 222-341	Analysis III- Differential Equations	4	4
COGNATE	CHEM 112	General and Analytical Chemistry	3	
GE PHIL	PHIL 210	Ethics		3
			18	**17**
		THIRD YEAR		
MAJOR	EE 447-448	Electromagnetics I-II	3	4
MAJOR	EE 343-344	Electronic Circuits I-II	5	3
MAJOR	EE 346	Digital Signal Processing		3
COGNATE	ELECT [1]	Elective		3
COGNATE	ENGR 350	Applied and Engineering Math	3	
GE T/RS	T/RS 122	Theology II	3	
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE PHED	PHED ELECT	Physical Education		1
			17	**17**
		FOURTH YEAR		
MAJOR	EE 449	Computer Interfacing	5	
MAJOR	EE 451	Communications Systems		3
MAJOR	EE 450	Control Systems	3	
MAJOR	EE 452-453	VLSI I-II	2	2
MAJOR	EE 454	Robotics Design Project		3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE S/BH	S/BH ELECT [2]	Social/Behavioral Electives	3	3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
GE PHED	PHED ELECT	Physical Education	1	
			17	**17**
			Total: 139 CREDITS	

[1] An advanced technical elective approved by the department.
[2] ECO 101 is recommended by the department.

PRE-ENGINEERING

The University provides a pre-engineering program which introduces the student to the highly technical training necessary for all phases of the engineering profession. This is a two-year course of study which enables the student to transfer to another school to complete his or her degree work.

Of special importance is The University of Scranton's association with the Cooperative Engineering Program at the University of Detroit Mercy, and its programs in chemical, civil, electrical, environmental, and mechanical engineering. For the student who has completed the pre-engineering curriculum at The University of Scranton, the Detroit Mercy three-year cooperative program offers alternate semesters of formal instruction and work experience in industry. A direct transfer program is available with Widener College, which may be either a co-op program beginning in the summer preceding the junior year or a regular two-year program. In addition to the valuable experience gained from industry, many students have been able to pay the cost of their tuition from the remuneration received for their work. This amounts to a substantial equivalent scholarship grant. Other schools into which University of Scranton students transfer include Lehigh, Bucknell, Penn State and Drexel.

Generally, different engineering programs have slightly different requirements which must be completed before starting the junior year. These will vary from school to school. Therefore, students should, before beginning the sophomore year, consult with an advisor at the institution at which they plan to complete their studies.

ENGINEERING TRANSFER PROGRAM

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
COGNATE (GE NSCI)	PHYS 140-141	Elements of Physics I-II	4	4
COGNATE	CMPS 134	Computer Science I		3
COGNATE (GE QUAN)	MATH 114-221	Analysis I-II	4	4
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL102	Computing and Information Literacy	3	
GE PHIL	PHIL 120	Introduction to Philosophy	3	
GE T/RS	T/RS 121	Theology I		3
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			18	**18**
		SECOND YEAR		
MAJOR	EE 240	Introduction to Digital Circuits	3	
MAJOR	EE 241	Circuit Analysis		4
MAJOR	ENGR 250-252	Statics Solid Material Science	3	3
MAJOR	ENGR 253-254	Introduction to CAD-3-D CAD	1	1
COGNATE	PHYS 270	Elements of Modern Physics	4	
COGNATE	MATH 222-341	Analysis II-Diff. Equations	4	4
COGNATE	CHEM 112-113[1]	General & Analytical Chem I-II	3	3
GE ELECT	ELECT	Free Elective		3
			18	**18**
			Total: 72 CREDITS	

[1]EE Major Elective may be substituted for CHEM 113

ENGR 250 Staff
Engineering Mechanics-Statics 3 credits
(Prerequisite: PHYS 140; pre- or co-requisite: MATH 221) Various types of force systems; resultants and conditions of translational and rotational equilibrium; stress analysis of the parts of different types of structures by graphical, algebraic and vector methods; frictional forces; centroids and second moments of areas of solids. Three hours lecture.

ENGR 251 Staff
Engineering Mechanics-Dynamics 3 credits
(Prerequisite: ENGR 250; pre- or co-requisite: MATH 222) Kinematics of particles and rigid bodies which include linear, curvilinear, angular and relative motions; inertia forces, impulse, momentum, work, energy and power; mechanical vibrations. Three hours lecture.

ENGR 252 Dr. Varonides, Prof. Kalafut
Solid State Materials Science 3 credits
(Prerequisites: PHYS 270, MATH 222) The crystalline state of matter; multielectron atoms and the band theory of solids; quantum statistics; applications to p-n junction diodes including photodetectors, LEDs and photovoltaics; biopolar and field-effect transistors; transistor modeling. Three hours lecture.

ENGR 253 Dr. Connolly
An Introduction to Computer-Aided Design 1 credit
(Prerequisites: MATH 114, CMPS 134) This course is an introduction to the methods of drafting and design using computer-aided techniques. Topics to be covered include plane geometry construction, projection theory, sectional views, dimensioning, tolerancing and the development of working drawings. Extensive use will be made of commercially available CAD software packages. Two hours laboratory.

ENGR 254 Dr. Connolly
3D Computer-Aided Design 1 credit
(Prerequisite: ENGR 253) This course is an advanced computer-aided design lab with emphasis on three-dimensional techniques. Topics to be covered include wireframe and solid modeling, rendering and Boolean operations. A number of classes will be devoted to the use of a finite-element program for mechanical analysis of CAD designs. Extensive use will be made of commercially available software packages. Two hours laboratory.

ENGR 350 Dr. Fahey
Applied and Engineering Mathematics 3 credits
(Prerequisite: MATH 222, PHYS 141) First- and second-order differential equations with constant coefficients; Fourier series, Fourier transforms and Laplace transforms; partial differential equations and boundary-value problems; special functions (e.g., Bessel functions and Legendre polynomials); numerical analysis and use of MAPLE software. (Also listed as PHYS 350.) Three hours lecture.

ENGR 352 Dr. Varonides
Statistical and Engineering Thermodynamics 3 credits
(Prerequisite: PHYS 270) Derivation of Thermo-dynamics from probability theory and atomic physics; Laws of Thermodynamics; Maxwell relations; chemical potential and phase changes; refrigerators and heat pumps; theory of gasses and theory of solids. Special topics dependent upon interests of majors represented. (Also listed as PHYS 352.) Three hours lecture.

E/CE 240 Dr. Berger
Introduction to Computer Engineering 3 credits
(Formerly EE 240) Introduction to combinational and sequential digital-logic circuits. Analysis and design techniques including Boolean algebra and Karnaugh mapping. Use of the computer to simulate digital circuits. Three hours lecture.

EE 241 Staff
Circuit Analysis 4 credits
(Prerequisite: PHYS 141; pre- or co-requisite: MATH 222) Intermediate course treating Kirchhoff's Laws, resistive networks, systematic methods, network theorems, first-and second-order transients, and sinusoidal steady-state. Introduction to SPICE. Three hours lecture and two hours laboratory.

EE 243L Dr. DiStefano
Digital System Design Laboratory 2 credits
(Formerly EE 345L) Introduction to the design, construction and testing of digital logic circuits. Most of the major components of a computer will be investigated. Use of computer program to draw circuits and designs. Three hours laboratory.

E/CE 340 Staff
Digital Systems 3 credits
(Prerequisites: E/CE 240, MATH 142, CMPS 350) Analysis and design of advanced digital circuits, minimization techniques, combinational and sequential circuit design and numerical techniques. The interdependence of hardware and software on computer design will be stressed.

EE 343 Dr. Varonides
Electronic Circuits I 3 credits
(Prerequisites: EE 241, ENGR 252) Analysis and design of analog electronic circuits using diodes, BJTs, and FETs. Emphasis is placed on amplifier circuits and their frequency dependence. Three hours lecture.

EE 343L Dr. Zakzewski
Electronic Circuits I Lab 2 credits
(Co-requisite: EE 343) Experiments with diodes, BJTs, JFETs and MOSFETs. Some of the experiments are short projects to introduce the student to the application of design principles. Three hours laboratory.

EE 344 Dr. Zakzewski
Electronic Circuits II 3 credits
(Prerequisite: EE 343, EE 343L) Laboratory-oriented course designed to acquaint students with the operation and design of electronic instrumentation. Analysis of electronic instruments used in various applications and the design of special-purpose instrumentation. Emphasis on use of operational amplifiers in design situations. One hour lecture and three hours laboratory.

EE 346 Dr. Berger
Digital Signal Processing 3 credits
(Prerequisites: EE 240, EE 241) A study of discrete-time signals and systems, convolution, z-transform, discrete Fourier transform, and FFT algorithms. Analysis and design techniques for digital filters and their realizations. Emphasis will be on the use of computer-aided interactive digital-signal processing programs for several projects on signal analysis and filter design. Three hours lecture.

EE 447 Dr. Varonides
Electromagnetics I 3 credits
(Prerequisites: PHYS 270, ENGR 350) Analytic treatment of electrical and magnetic theory; vector calculus of electrostatic fields; dielectric materials; vector calculus of magnetic fields. (Also listed as PHYS 447.) Three hours lecture.

EE 448 Staff
Electromagnetics II 3 credits
(Prerequisite: EE 447) Magnetic materials, electromagnetic induction, displacement currents, Maxwell's equations; radiation and waves; applications include transmission lines, wave guides, and antennas. (Also listed as PHYS 448.) Three hours lecture.

EE 448L Dr. Zakzewski
Electromagnetics Design Laboratory 1 credit
(Co-requisite: EE 448) Laboratory designed to emphasize and reinforce the experimental basis of electromagnetism. Multi-week projects require the student to perform experiments that measure fundamental electrical constants, the electrical and magnetic properties of matter, and the properties of electromagnetic waves. (Also listed as PHYS 448L.) Two hours laboratory.

EE 449 Dr. Spalletta
Computer Interfacing 5 credits
(Prerequisites: EE 344, EE 346) Microprocessor programming and interfacing; data acquisition, manipulation and transmission; microprocessor support devices and common computer interfaces. Periodic written and oral presentations are required. Three hours lecture and four hours laboratory.

EE 450 Staff
Control Systems 3 credits
(Prerequisites: EE 344, ENGR 350) Review of system modeling and Laplace Transforms; block diagram reduction and signal-flow graphs; transient and steady-state control-system characteristics; root locus and frequency-response methods of analysis and compensation design; state variable methods. Three hours lecture.

EE 451 Staff
Communication Systems 3 credits
(Prerequisites: EE 344, ENGR 350) A study of the principles of communication theory with emphasis given to analog and digital communications. Modulation techniques such as AM, DSB, SSB, and FM are discussed in detail. Performance of these systems in the presence of noise is also studied. Three hours lecture.

EE 452 Dr. DiStefano
Very Large Scale Integration Devices I 2 credits
(Prerequisites: EE 240, EE 344) Analysis of MOSFET and CMOS circuitry. Use of computer programs such as SPICE and OCTTOOLS to design and analyze student design projects involving tens of transistors. Two hours lecture.

EE 453 Dr. DiStefano
Very-Large-Scale Integration Devices II 2 credits
(Prerequisite: EE 452) Continuation of EE 452. VLSI computer compilers are used to design electronic circuits. One hour lecture and two hours laboratory.

EE 454 Dr. Spalletta
Robotics Design Project and Professional Practice 3 credits
(Prerequisites: EE 449, EE 450) Students work with the faculty and/or a practicing electronics engineer to design a self-contained intelligent robot. This robot will be required to navigate a maze, carry out a task (such as retrieving a specific object) and return through the maze. Each project involves creative conception, design, development and evaluation and must consider economic constraints as well as factors such as reliability and safety. Written and oral presentations before a group of faculty. One hour lecture and three hours laboratory.

EE 484 Dr. Varonides
Superconductivity Devices and Circuits 3 credits
(Prerequisites: EE 447, ENGR 252) A course designed for students with interest in superconductivity. Strong background in calculus, electromagnetics and solid-state devices is necessary. Topics to be discussed are: (a) perfect conductivity, the classical model of superconductivity, and direct applications; (b) the quantum model of superconductivity, Josephson junctions and superconducting devices (SQUID's). Homework problems routinely assigned. Group projects (literature search and brief presentations at the end of the term) are also assigned.

ENGLISH

DR. JONES DeRITTER, Chairperson

The English Department offers courses in literature, theatre, writing, film, pedagogy, and theory. Courses are designated as English (ENLT), Theatre (THTR), and Writing (WRTG) and are described below under these groupings. In addition to the majors in English and Theatre described in the following section, the department offers minors in English, Theatre, and Writing. If they wish, English majors may pursue either *minors* or *tracks* in Theatre and Writing. English majors pursuing *tracks* in Writing or Theatre may place these courses in either the elective or cognate area of the major. English majors pursuing *minors* in Writing or Theatre may place these courses in the cognate area but not in the elective area of the major. (Courses used for a minor cannot be applied to requirements or electives within the major.)

ENGLISH MAJOR. The student majoring in English must take ENLT 140 (English Inquiry) or the equivalent, and twelve other courses designated ENLT, THTR, or WRTG. Students are required to take at least one course in each of the following areas:

A. British Literature: Medieval and Renaissance (ENLT 234, 235, 240, 340, 342, 343)
B. British Literature: Restoration and Eighteenth Century (ENLT 241, 345)
C. British Literature: Romantic and Victorian (ENLT 236, 237, 242, 347, HUM 286)
D. American Literature to 1865 (ENLT 212, 230, 243, 350, 351)
E. Modern British Literature (ENLT 239, 244, 361)
F. American Literature, 1865 to the Present (ENLT 245, 353, 355, 455)

In addition, of the twelve courses beyond ENLT 140 or the equivalent, at least one must be at the 300 level, at least one must be a 400-level senior seminar, at least one more must be at the 300 or 400 level, and at least one must be designated Theory Intensive: ENLT 225, 228, 341, 462. Students may place Theatre and/or Writing courses in either the English major or the cognate area, but no course can be counted for both the major and the cognate. Although the English department strongly recommends ENLT 140 as the initial course in the major, any ENLT course numbered from 120 to 179 may serve as an equivalent and be substituted both in the major and as a prerequisite for more advanced course work. A total of no more than two courses with a number between 120 and 179 can be counted toward the major.

THEATRE TRACK. Completion of this track will be noted on the English major's transcript. The student must complete a minimum of five courses (15 credits). Courses counted toward the track include any course designated with the THTR prefix; WRTG 215, 217, 315; and ENLT 211, 220, 295, 340, 341, 345, 355.

WRITING TRACK. Completion of this track will be noted on the English major's transcript. The student must complete a minimum of five courses (15 credits) designated with the WRTG prefix and numbered at the 200 level or above. Of these five courses, at least one must be in Creative Writing (WRTG 213, 214, 215, 216, 217, 313, 314, 315, 316), and at least one must be in Applied Writing (WRTG 210, 211, 212).

ENGLISH MINOR. To minor in English, the student must take a minimum of six courses (18 credits). One of these courses must be ENLT 140 or the equivalent (see above). The remaining 15 credits must be taken in courses that would satisfy area or elective requirements for the major. No more than two courses with a number between 120 and 179 may be counted toward the minor.

THEATRE MINOR. To minor in Theatre, the student must take a minimum of six courses (18 credits). Three courses are required: THTR 110, THTR 111 and either THTR 211 or THTR 212. Elective courses counted toward the minor include any course with the THTR prefix and/or WRTG 215, 217, or 315. The student may also include one of the following literature courses: ENLT 122, 211, 220, 295, 340, 341, 345, 355, 461.

WRITING MINOR: To minor in Writing, the student must take a minimum of six courses (18 credits). All six courses must carry the WRTG prefix, and all six must be listed at the 200 level or above. The student must take at least one course in Creative Writing (WRTG 213, 214, 215, 216, 217, 313, 314, 315, 316) and one course in Applied Writing (WRTG 210, 211, 212).

ENGLISH

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR	ENLT 140	English Inquiry	3	
MAJOR	ENLT	Area Requirement		3
MAJOR	ENLT-WRTG-THTR	Major Elective		3
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE QUAN	QUAN ELECT	Quantative Reasoning Elective		3
GE WRTG	WRTG 107	Composition	3	
GE COMM	COMM 100	Public Speaking		3
GE C/IL	C/IL 103	Computing & Information Literacy	3	
GE PHIL-T/RS	PHIL 120-T/RS 121	Intro to Philosophy -Theology I	3	3
GE FSEM - PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1	1
			16	**16**
		SECOND YEAR		
MAJOR	ENLT	Area Requirement	3	3
MAJOR	ENLT-WRTG-THTR	Area Requirement and/or Elective	3	3
COGNATE	ELECT	Electives	3	3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
		THIRD YEAR		
MAJOR	ENLT	Area Requirement	3	3
MAJOR	ENLT-WRTG-THTR	Area Requirement and/or Elective		3
COGNATE	ELECT	Electives	6	6
GE PHIL-T/RS	PHIL 210-T/RS 122	Electives	3	
GE S/BH	S/BH ELECT	Social/Behavioral Electives	3	3
GE ELECT	ELECT	Free Electives	3	3
			18	**18**
		FOURTH YEAR		
MAJOR	ENLT 490 or 491	Senior Seminar	3	
MAJOR	ENLT-WRTG-THTR	Area Requirement and/or Electives	3	3
COGNATE	ELECT	Electives	3	3
GE HUMN	HUMN ELECT	Humanities Elective		3
GE ELECT	ELECT	Free Electives	6	6
			15	**15**
				Total: 130 CREDITS

All ENLT courses numbered 200 or above have levelled prerequisites:

1. For 200-level course—ENLT 140 or equivalent (ENLT course numbered 120-179)
2. For 300-level course—ENLT 140 or equivalent; 200-level ENLT course strongly recommended
3. For 400-level course—ENLT 140 or equivalent; 300-level ENLT course strongly recommended

ENLT 103 Staff
Children's Literature 3 credits
Formerly ENGL 130
A broad study of literature for children since 1800, with the emphasis on American works since 1950, including aesthetic consideration of the art and design of picture books. Works for children up to the age of 12 are considered.

ENLT 110 Dr. McInerney
History of Cinema 3 credits
Formerly ENGL 124
A study of the historical development of motion pictures. Practitioners in America and throughout the world are treated in this concise history of cinema. Film screening fee.

ENLT 111 Dr. McInerney
The Art of Cinema 3 credits
Formerly ENGL 125
The study of the artists, technicians and businessmen who make films. Taped interviews of internationally famous film-makers, as well as an analytic scrutiny of modern films, develop students' intelligent, active participation in the major art form in modern culture. Film screening fee.

ENLT 112 Dr. McInerney
Film Genres 3 credits
Formerly ENGL 126
A study of the popular film genres (i.e., the western, the thriller, the musical, the historical epic, the woman's picture) as they developed and changed in the U.S. and abroad. Film screening fee.

ENLT 113 Dr. McInerney
Film Criticism 3 credits
Formerly ENGL 127
A study of the grammar, poetics, rhetoric, and aesthetic of film criticism constitutes the heart of this course. Film screening fee.

ENLT 120 Staff
(CL)Introduction to Fiction 3 credits
Formerly ENGL 102
An exploration of the nature of prose fiction, its elements and techniques. The emphasis is critical rather than historical. The range of works and the specific selections may vary with the individual instructor.

ENLT 121 Staff
(CL)Introduction to Poetry 3 credits
Formerly ENGL 103
An exploration of the nature of poetry, its value, aims, and techniques. The emphasis will be critical rather than historical. The range of poems and the specific selections may vary with the individual instructor.

ENLT 122 Staff
(CL)Introduction to Drama 3 credits
Formerly ENGL 104
An exploration of the nature of drama, its types, techniques, and conventions. The emphasis will be critical rather than historical. The range of plays and the specific selections may vary with the individual instructor. This course may be counted toward the Theatre minor.

ENLT 123 Dr. Jordan
Masterworks of Western Civilization 3 credits
Formerly ENGL 119
Study of masterpieces of literature from the Hebrew Old Testament and classic Greek to the modern European, illuminating the development of Western civilization.

ENLT 125 Dr. Gougeon
(CL)Classic American Stories 3 credits
Formerly ENGL 122
As an introduction to the American short story, this course will examine representative examples of the genre from the 19th century to the present. Emphasis will be placed on the significance of individual works, but some consideration will be given to the evolving American milieu. Authors such as Hawthorne, Poe, Crane, Malamud, and Oates will be considered.

ENLT 126 Dr. Whittaker
(CL, D)Introduction to Irish Culture 3 credits
Formerly ENGL 133
An exploration of Irish culture by means of the island's major works of mythology, history, religion, folk story, fairy tale, song, verse, drama and fiction. All readings in English.

ENLT 127 Dr. Jordan
(CL)Myth of the Hero 3 credits
Formerly ENGL 121
Mythic materials are examined to discover the underlying heroic archetypal patterns. Then modern literature is examined in the light of the same mythic patterns.

ENLT 140 Staff
(CL)English Inquiry 3 credits
Formerly ENGL 140
An exploration of fiction, poetry, and drama. The approach is inductive; the aims are a greater understanding of literature, and an introduction to techniques of literary scholarship, theory, and research.

Note: All 200-level ENLT courses have a prerequisite of ENLT 140 or equilvalent.

ENLT 210 Prof. Hill
(CL)Modern Poetry 3 credits
Formerly ENGL 221
Prerequisite: ENLT 140 or equivalent; previous study of poetry. Modern poets ranging from Yeats and Hopkins to Plath and Hughes are examined. Major emphasis is placed on close critical readings of representative works.

ENLT 211 Dr. McInerney
(CL)Dramatic Comedy 3 credits
Formerly ENGL 223
Principles, modes, tactics used in dramatic comedy. The plays of writers ranging from Shakespeare to Neil Simon, as well as several films, will be analyzed as models. Opportunity for student writing of comedy. This course may be counted toward the Theatre track or minor.

ENLT 212 Dr. Gougeon
(CL,W) Masters of Darkness 3 credits
Formerly ENGL 330
This course will survey a significant sampling of the short works of three of America's most famous "dark Romantic" writers: Melville, Hawthorne, and Poe. Consideration will be given to the historical milieu and the authors' responses to the problems and promises of the American experience.

ENLT 213 Dr. Passon
(CL,W) Introduction to Satire 3 credits
Formerly ENGL 320
An exploration of the historical, critical, and conceptual nature of satire, including established satirical conventions and techniques. Representative examples in fiction, drama, and poetry from a variety of literary periods will be considered. Though the course will focus on satirical literature, examples of satire from other media will be sampled.

ENLT 214 Dr. Fraustino
Macabre Masterpieces 3 credits
Formerly ENGL 321
This course studies works of horror–or Gothic–fiction, in England and America that best exemplify this mode of writing as a serious art form in its exploration of the human mind, particularly abnormal psychology. Works read may include: Mary Shelley's *Frankenstein*, Robert Louis Stevenson's *Dr. Jekyll and Mr. Hyde*, Joseph Conrad's *Heart of Darkness*, Bram Stoker's *Dracula*, the works of Edgar Allan Poe, and others.

ENLT 215 Dr. Fraustino
(CL)Literature of the Absurd 3 credits
Formerly ENGL 421
Focusing on literature from 1850 to the present, this course will examine works of fiction, drama, and to some extent poetry that reflect a general 19th- and 20th-century western sense of disintegrating values and lost religious beliefs. Readings will include works by Edgar Allan Poe, Lord Byron, Thomas Hardy, Robert Louis Stevenson, Joseph Conrad, Tennessee Williams, Ernest Hemingway, and Samuel Beckett.

ENLT 220 Dr. Friedman
(CL)Shakespeare 3 credits
Formerly ENGL 134
An introduction to the works of William Shakespeare, including forays into each of the major dramatic genres (comedy, tragedy, history, and romance). Consideration will be given to the biographical and cultural contexts which helped to determine the reception and impact of individual works. This course may be counted toward the Theatre track or minor.

ENLT 221 Dr. Whittaker
(W)Woody Allen 3 credits
Formerly ENGL 231
This course examines the films, the published screenplays, the volumes of short prose, and assorted interviews and articles. We will examine some of Woody Allen's sources, such as Plato, Shakespeare, Joyce, and Bergman. Our approach will be historical and analytical.

ENLT 222 Dr. Engel
(CL, D,W)Graham Greene's Travellers 3 credits
Formerly ENGL 284
A study of selected writings by Greene, focusing on the journeys made by protagonists who venture beyond the relative comfort of their life at home to the disorienting challenges of life in the developing and post-colonial worlds. An exploration of Greene's use of historical, religious, and political unrest in Africa, Latin America, Haiti, and French Indo-China to move his protagonists from a position of aloofness from the world to one of commitment to its needs.

ENLT 225 Dr. Whittaker
(CL, D,W) Writing Women 3 credits
(Theory Intensive)
Formerly ENGL 225
In this course we will survey the issues raised in Virginia Woolf's *A Room of One's Own* and Carolyn G. Heilbrun's *Writing a Woman's Life*. We will discuss theoretical and practical essays incorporating British Marxist Feminism, French Psychoanalytic Feminism, and American Traditional Feminism. By the light of these approaches we will read short selections of fiction and poetry from Sappho to Willa Cather and Adrienne Rich.

ENLT 226 Dr. Casey
(CL, D)Novels by Women 3 credits
Formerly ENGL 235
A study of novels by and about women, including such authors as Austen, Bronte, Eliot, Chopin, Woolf, Lessing, Byatt, and Morrison. The aim is to expand students' knowledge of the novel's history and development and their understanding of women's experiences as expressed by women writers.

ENLT 227 Dr. DeRitter
(CL, D,W)Frankenstein's Forebears 3 credits
Formerly ENGL 227
An interdisciplinary exploration of the lives and works of one of England's most fascinating literary families. William Godwin was an anarchist philosopher and novelist; Mary Wollstonecraft was a feminist, memoirist, and novelist; their daughter, Mary Shelley, is best known as the author of *Frankenstein*, while her husband, Percy Bysshe Shelley, was a well-known poet and political radical in his own right.

ENLT 228 Dr. DeRitter
(CL, D,W)Race in Anglo-American Culture, 1600-1860 3 credits
(Theory Intensive)
Formerly ENGL 317
This course will examine Anglo-American portrayals of African- and Native-American peoples in the early modern era. We will study works from both high culture (poems, plays, and novels) and low culture (Indian captivity narratives, frontier biographies, slave autobiographies). The reading list will include writers such as Hakluyt, Rowlandson, Dryden, Behn, Cooper, Melville, Longfellow, Sedgwick, Douglass, and Stowe.

ENLT 229 Prof. Schaffer
(CL, D) The Cross-Cultural Novella 3 credits
Formerly ENGL 351
This course aims both to foster an understanding and appreciation of the novella as a distinct literary form combining the short story's unique focus on character and closed plot structure with the novel's broader treatment of time and place and to introduce the student to the literature of a variety of continents and cultures. The course will deal with writers such as Tolstoy, Flaubert, Kafka, Kawabata, Mann, and Gaines.

ENLT 230 Dr. Gougeon
(CL)American Romanticism 3 credits
(Area D) *Formerly ENGL 324*
This course will deal with representative short works of America's six major Romantic authors: Emerson, Thoreau, Whitman, Hawthorne, Melville, and Poe.

ENLT 234 Dr. Beal
(CL,W)Camelot Legend 3 credits
(Area A) *Formerly ENGL 219*
This course will examine the development of Arthurian legend-tales of knights and ladies associated with the court of King Arthur-from its early origins in Celtic and Latin medieval literature, through medieval romances and histories, culminating in Malory's *Morte D'Arthur.*

ENLT 235 Dr. Beal
(CL,W)Literature in the Age of Chaucer 3 credits
(Area A) *Formerly ENGL 165*
This course will explore 14th-century non-dramatic vernacular literature. In addition to Chaucer, authors studied may include Langland, Kempe, and the Pearl Poet.

ENLT 236 Dr. Fraustino
(CL,W) The Romantic Protest 3 credits
(Area C)
This course examines the poetry and prose of the first half of the British Romantic period. We will discuss the intellectual and metaphysical protests of these early writers against the "New Science" and its mechanical universe, against organized religion, against the authority of the Bible, and against the Neo-classical poetic style. We will examine related topics such as the Romantic imagination and its metaphysical implications, the role of physical nature in romantic mysticism, and Romantic notions concerning heightened sensation and altered realities. We will discuss Blake, Wordsworth, Coleridge, and at least three of the following: Dorothy Wordsworth, Anna Laetitia Barbault, Mary Tighe, Robert Southey, Mary Robinson, Joanna Baillie, Charles Lamb, William Hazlitt, and Charles Maturin.

ENLT 237 Dr. Fraustino
(CL,W) The Darker Romantics 3 credits
(Area C)
This course examines the poetry and prose of the second half of the British Romantic period. We will discuss the indebtedness of these later writers to the "Romantic religion" of Blake, Coleridge, and Wordsworth. While we will consider the continuing romantic emphasis on physical nature and the imagination, we will examine the effects of approaching Victorianism–its prosperity, industrialism, scientific discoveries, and increasing religious doubt–on the later Romantics. The closer we approach the Victorian period, the further behind we leave romantic faith and mysticism. We will discuss at least six of the following writers: Byron, Percy Shelley, Keats, William Hazlitt, Thomas DeQuincey, Thomas Love Peacock, Felicia Dorothea Hemans, Mary Shelley, and Laetitia Elizabeth Landon.

ENLT 239 Dr. Whittaker
(CL, D,W)Irish Short Story 3 credits
(Area E) *Formerly ENGL 334*
Introduces American students to the variety and richness of the short story from the pens of such masters as Yeats, Joyce, Frank O'Connor, McGovern, Jordan, Trevor, Beckett and others. Serious craftsmen aware of the verbal tradition, shapers of the Literary Revival, these masters of language forge a literature that affirms spiritual values in the midst of material misery.

ENLT 240 Drs. Beal, Friedman
British Literature: Medieval & Renaissance 3 credits
(Area A) *Formerly ENGL 164*
A detailed study of representative works and authors from the Anglo-Saxons to the 17th century. Though the emphasis will be on an intensive study of major works in their literary and cultural context, consideration will be given to minor writers as well.

ENLT 241 Dr. DeRitter
British Literature: Restoration & 18th Century 3 credits
(Area B) *Formerly ENGL 244*
Study in depth of the major works of such authors as Dryden, Pope, Swift, Boswell, and Johnson, among others. Due attention will be given to critical analysis, literary research, and historical, social, and political background.

ENLT 242 Drs. Casey, Fraustino
British Literature: Romantic & Victorian 3 credits
(Area C) *Formerly ENGL 264*
A study of the major literary works in 19th-century England: poetry, novels and non-fictional prose. The emphasis is threefold: critical analysis; literary history; social, intellectual and political background.

ENLT 243 Dr. Gougeon, Fr. Quinn
American Literature to 1865 3 credits
(Area D) *Formerly ENGL 344*
An in-depth study of a select group of major American authors from the Colonial Period to the Civil War. Included are Bradford, Franklin, Irving, and Poe. Consideration given to the historical and cultural milieu and development of major American themes and attitudes.

ENLT 244 Drs. Engel, Whittaker
Modern British Literature 3 credits
(Area E) *Formerly ENGL 364*
Selected modern and postmodern English poets, playwrights, and fiction writers: Hopkins, Eliot, Hughes, Auden, Larkin, Spender, Osborne, Stoppard, Pinter, Greene, Waugh, Read, Lodge, Amis, Spark, McEwan and Chatwin.

ENLT 245 Drs. Whittaker, Gougeon
American Literature, 1865 to the Present 3 credits
(Area F) *Formerly ENGL 444*
Study of a select group of major American authors from the Civil War to the present. Included are Twain, Crane, Fitzgerald and Vonnegut. The historical and cultural milieu and the development of major American themes and attitudes are reviewed.

ENLT 295 Dr. Friedman
(CL)Shakespeare in Stratford 3 credits
Formerly ENGL 295
This course combines a traditional study of six Shakespearean plays on the University campus with a week-long residency at the Shakespeare Centre in Stratford-upon-Avon, England. Students will read and discuss the plays produced during the current Royal Shakespeare Company season and attend performances of those plays.

Note: All 300-level ENLT courses have a prerequisite of ENLT 140 or equivalent; a 200-level ENLT course is strongly recommended.

ENLT 340 Dr. Beal
Introduction to Late Medieval Drama 3 credits
(Area A) *Formerly ENGL 226*
An introduction to the drama which flourished in the late 14th and 15th centuries: the Corpus Christi cycle, morality plays such as *Everyman*, *Mankind*, and *Castle of Perseverence*, and the saint's play. (Individual plays studied will change from year to year.) This course may be counted toward the Theatre track or minor.

ENLT 341 Dr. Friedman
(CL,W)Shakespeare: Special Topics 3 credits
Formerly ENGL 335
(Theory Intensive)
A detailed study of Shakespeare's treatment of either a particular genre (comedy, tragedy, history, romance) or a particular subject that occurs across genres. Special attention will be paid to the meaning of plays in performance. This course may be counted toward the Theatre track or minor.

ENLT 342 Staff
Renaissance Poetry & Prose 3 credits
Formerly ENGL 323
Detailed study and discussion of several varieties of English literature written between the time of Sir Thomas More and that of John Milton. Lyric and narrative poetry, fictional and non-fictional prose, and drama will be included in course readings, discussions, and assignments. Typical authors covered include More, Surrey, Lyly, Spenser, Sir Philip and Mary Sidney, Donne, Webster, Jonson, Marvell, and Milton.

ENLT 343 Staff
Milton & 17th-century Poetry 3 credits
Formerly ENGL 139
Studying the poetry of John Milton, "a major figure," the Metaphysical poets, and the Cavalier poets ought to bring the student to a reputable understanding of the late English renaissance. The 17th century is a vital era for those wishing to understand the results of the Elizabethan Age and the onrush of Restoration and 18th-century poets.

ENLT 344 Dr. DeRitter
Milton's *Paradise Lost* 3 credits
Formerly ENGL 318
Intensive study of Milton's masterpiece. In addition to our reading and discussion of the text itself, we will examine its biographical and historical context and explore a variety of critical approaches to the poem.

ENLT 345 Dr. DeRitter
(CL, W)Restoration & 18th-century Drama 3 credits
(Area B) *Formerly ENGL 245*
An examination of the major developments in comedy, tragedy, and experimental dramatic forms on the English public stage between 1660 and approximately 1775. Discussions will focus frequently on the social, political and institutional changes which altered the ways in which theatre was produced during the period. The reading list will include works by Wycherley, Behn, Dryden, Otway, Congreve, Rowe, Addison, Steel, Gay, Lillo, Fielding, Goldsmith, and Sheridan. This course may be counted toward the Theatre track or minor.

ENLT 346 Dr. Casey
The English Novel: 18th & 19th Centuries 3 credits
Formerly ENGL 319
The history of the English novel from its origins in the early 18th century until the end of the 19th century. The course focuses on such major figures as Defoe, Richardson, Fielding, Austen, Dickens and Eliot.

ENLT 347 Dr. Casey
Victorian Voices 3 credits
Formerly ENGL 371
This course will focus on three major Victorian authors: one non-fiction prose writer, one novelist, and one poet. Possible authors include Carlyle, Arnold, Ruskin, Dickens, Eliot, Bronte, Tennyson, Browning, Rossetti.

ENLT 348 Prof. Hill
(CL, D,W)Colonial & 3 credits
Postcolonial Fiction
Formerly ENGL 322
This course explores myths and meanings of 19th- and 20th-century European colonialism in Asia, Africa, and the Americas by representative authors such as Achebe, Conrad, Forster, Kincaid, Kipling, Naipaul, Orwell, Rushdie, and others.

ENLT 350 Dr. Gougeon
Major Works: 3 credits
American Romantics
(Area D) *Formerly ENGL 325*
Cooper's *The Prairie*, Emerson's *Nature*, Thoreau's *Walden*, Melville's *Moby Dick*, and others. Evaluation of the works in their historical context and the development of the American Romantic movement, 1820-1865.

ENLT 351 Fr. Quinn
Transcendentalists 3 credits
Formerly ENGL 326
This course transcends the typical limits of this literary period to Emerson and Thoreau's major works. Thus, Orestes Brownson, Margaret Fuller, Ellery Channing, Theodore Parker are covered.

ENLT 352 Dr. Gougeon
(CL,W) The Development of 3 credits
the American Novel
Formerly ENGL 333
This course will deal with representative novels produced in America from the late 18th to the 20th century. The course will focus on the novel as representative of changing literary and cultural values throughout the period. Authors considered will include Charles Brockden Brown, Nathaniel Hawthorne, Mark Twain, Kate Chopin, John Steinbeck, and Kurt Vonnegut, Jr.

ENLT 353 Dr. Gougeon
Major Works: 3 credits
American Realists
(Area F) *Formerly ENGL 425*
Twain's *Huckleberry Finn*, Howell's *The Rise of Silas Lapham*, James's *The American*, Crane's *The Red Badge of Courage*, Dreiser's *Sister Carrie* and others. Works are evaluated in their historical milieu and the development of American Realism, 1865-1900.

ENLT 354 Fr. Quinn
Major Works of 3 credits
Twain & James
Formerly ENGL 331
Works to be studied include Twain's *Huckleberry Finn* and *A Connecticut Yankee in King Arthur's Court*, and James's *Portrait of a Lady* and *The Ambassadors*. These works will be examined both in terms of their historical context and by way of a comparative analysis of the two authors.

ENLT 355 Dr. McInerney
American Drama 1919-1939 3 credits
(Area F) *Formerly ENGL 427*
A review of the first "golden age" of American drama, which includes biting masterpieces such as *The Hairy Ape*, *Awake and Sing*, and comic works such as *You Can't Take It With You* and *The Time of Your Life*. This course may be counted toward the Theatre track or minor.

ENLT 356 Fr. Quinn
Major Works 3 credits
of Hemingway & O'Hara
Formerly ENGL 332
Works to be studied include Hemingway's *The Sun Also Rises* and *For Whom the Bell Tolls*, and O'Hara's *Appointment in Samarra* and *From the Terrace*. These will be examined both in terms of their historical context and basic themes, and by way of a comparative analysis of the two authors. We will also investigate how certain authors either become or do not become academically and critically acceptable.

ENLT 360 Prof. Schaffer
(D)Introduction to 3 credits
Jewish Literature
Formerly ENGL 329
The course provides a broad literary overview of Jewish life from medieval times to the present, examining the poetry, fiction, memoirs, and drama of Jewish writers from a variety of cultures.

ENLT 361 Dr.Whittaker
Modern Irish Novel 3 credits
(Area E) *Formerly ENGL 336*
A selective introductory course to Ireland's renowned modern novelists: Francis Smart, John McGahern, William Trevor, Neil Jordan, Brian Moore, Bernard MacLaverty, John Banville and others. These literary artists capture the verve, flavor, and illumination that distinguish today's Irish novels.

ENLT 362 Dr. Whittaker
Literature & Philosophy 3 credits
Formerly ENGL 232
This course explores the Platonic insight that on the highest level literature and philosophy converge. We begin with a few of Plato's dialogues which develop this idea. Then we examine several "literary" works in English which embody it. Our approach is analytical, inductive and historical.

ENLT 363 Dr. Whittaker
Magazine Editing 3 credits
Formerly ENGL 311
The process of editing is surveyed. Macro-editing (publishing for a defined audience and delighting, surprising, informing, and challenging it) is emphasized over micro-editing (grammar, punctuation, and so forth). Both are fitted into the larger picture of promotion, fulfillment, circulation, advertising, production, and distribution.

ENLT 364 Dr. Engel
Modern Novel 3 credits
Formerly ENGL 419
The evolution of the novel from modern to postmodern times. Major American and English writers are studied, moving from traditional narrative to self-conscious stylistic devices.

ENLT 365 Dr. Fraustino
Comparative Romanticism 3 credits
Formerly ENGL 420
Major British and American Romantic writers will be studied in an effort to distinguish the forms Romanticism takes in the two countries and to determine possible relationships. Authors to be examined include Blake, Wordsworth, Coleridge, Shelley, Keats, Hawthorne, Poe, Emerson, and Whitman.

ENLT 366 Dr. Beal
Dante's *Divine Comedy* 3 credits
Formerly ENGL 431
A canto-by-canto study, in translation, of Dante's dream vision of hell, purgatory, and heaven. Consideration will be given to the cultural milieu and to medieval art and thought as these affect the allegorical meaning and structure of the poem.

ENLT 367 Dr. Jordan
Gerard Manley Hopkins, S. J. 3 credits
Formerly ENGL 436
Gerard Manley Hopkins, the only priest-poet ever to be honored with a place in Westminster Abbey's Poet's corner, will be studied in his literary and Jesuit contexts as a nature, Victorian, religious, original, theological, meditative, and modern poet.

ENLT 368 Prof. Hill
Conrad's Fiction 3 credits
Formerly ENGL 437
A reading of major works by Conrad and survey of critical response to this quintessential modern Western writer.

ENLT 382-383 Staff
Guided Independent (variable credit)
Study *Formerly ENGL 382-383*
A tutorial program open to third-year students. Content determined by mentor.

ENLT 395 Dr. Whittaker
Travel Seminar: Ireland 3 credits
Formerly ENGL 395
This is an artistic, cultural, literary tour. Students will study the people and places that contribute to Ireland's distinct place in the world of literary art. (Intersession or Spring Break)

Note: All 400-level ENLT courses have a prerequisite of ENLT 140 or equivalent; a 300-level ENLT course is strongly recommended.

ENLT 443 Dr. Beal
Chaucer 3 credits
Formerly ENGL 432
A study of Chaucer's poetry in the context of medieval culture. Readings and assignments will concentrate on *The Canterbury Tales*, but will also cover the other major poems, such as the *Book of the Duchess* and the *Parliament of Birds*.

ENLT 447 Dr. Fraustino
Keats: Death & Love 3 credits
Formerly ENGL 434
This course will focus almost exclusively on one writer, John Keats, and explore the dynamic relationship in his poetry between death and love.

ENLT 455 Fr. Quinn
American Realists 3 credits
(Area F) *Formerly ENGL 424*
Study of representative figures in the post-Civil War period, the period of the rise of American realism. Authors treated will be Mark Twain, Henry James, Stephen Crane, and selected modern authors.

ENLT 458 Dr. Whittaker
Joyce 3 credits
Formerly ENGL 438
This course explores the prose works of James Joyce, one of the lights of Anglo-Irish writing, and a major figure in 20th-century literature. We will read and discuss *Dubliners*, *A Portrait of the Artist as a Young Man*, and, with the help of various guides, the masterpiece, *Ulysses*. We will work to apprehend in Joyce both the universal and the peculiarly Irish.

ENLT 461 Dr. McInerney
Modern Drama 3 credits
Formerly ENGL 422
(Prerequisite: in addition to ENLT 140 and 300-level ENLT course, some previous study of drama) A detailed introduction to the major trends and authors in 20th-century British and American drama, with some Irish and Continental works included. Readings and assignments will focus on major figures such as Shaw, O'Neill, Miller, Williams. This course may be counted toward the Theatre track or minor.

ENLT 462 Staff
Literary Criticism & Theory 3 credits
(Theory Intensive)
Formerly ENGL 464
This course analyzes the derivation and methodology of the theories underlying contemporary practice. For historical perspective, we turn to Plato and Aristotle, and then to a survey of other major Classical, Renaissance, Enlightenment, and 19th-century sources. Thence we examine 20th-century critical theories, namely psychoanalysis, Marxism, feminism, formalism (New Criticism), reader response, structuralism, deconstruction, and cultural materialism (New Historicism).

ENLT 470 Dr. Rakauskas
Teaching Modern Grammars 3 credits
Formerly ENGL 460
This course is designed to provide an understanding of the English language and its grammar, based upon recent linguistic analysis of the language, and to assist the future teacher in his or her understanding of transformational / generative grammar and its place in the curriculum. Techniques for teaching these new grammars, and laboratory teaching experience in the first-year writing clinic will be presented.

ENLT 480 Staff
Internship (variable credit)
Formerly ENGL 480
English majors can receive internship credit for a variety of on-the-job work experiences. Approval must be obtained beforehand from chairperson and dean.

ENLT 482-483 Staff
Guided Independent (variable credit)
Study *Formerly ENGL 482-483*
A tutorial program open to fourth-year students. Content determined by mentor.

ENLT 490-491 Staff
(W)Senior Seminar 3 credits
The topics of these writing-intensive seminars vary from semester to semester. Based largely on student writing, presentations, and discussion, this capstone course is required in the major and culminates in the student's development of a seminar paper. May be repeated for credit. Enrollment limited to 15 students per section.

Single letters preceding course titles identify courses which meet university General Education requirements for Culture, Diversity, or Writing-Intensive credits. (Theory) and (Area) citations refer to the requirements for the English major (see above).

THEATRE

PROF. RICH LARSEN, Program Director

As a major existing within the English Department, Theatre offers a broad-based liberal arts degree for the theatre generalist. The Theatre major prepares the student for further, more focused training in the theatrical arts through a wide variety of courses in performance arts, technical theatre, design arts, directing, theatre history, playwriting and dramatic literature. Students may focus their programs of study to some degree toward specific interests in these areas of theatre through the use of electives within the major.

Theatre majors are strongly encouraged to complete either a minor (perhaps in English or Writing) or a second major (perhaps in English). Other combinations are possible.

Theatre majors are required to participate in University Players productions; Theatre minors are strongly encouraged to do so. All students with an interest in theatre, whatever their major, are invited to participate in University Players productions. (See also "Theatre" under Extracurricular Activities.)

Students majoring in Theatre are required to take three introductory courses in Theatre, Acting, and Technical Theatre (THTR 110, 111, 112), two Theatre History courses (THTR 211, 212), Design for the Theatre (THTR 213), Directing I (THTR 311), and five credits of Production Laboratory (THTR 280, 380). Four elective courses in Theatre round out the major. Introduction to Drama (ENLT 122), and at least one other course in Dramatic Literature are required in the student's cognate area. Courses which would satisfy the Dramatic Literature requirement include ENLT 211, 220, 295, 340, 341, 345, 355, 461.

THTR 110 Staff, Prof. Larsen
(CL)Introduction to Theatre 3 credits
An introduction to the theories and practices of the theatre arts. Dramatic structure, dramatic literature, critical writing, acting, directing, design, practical stagecraft, and some theatre history will all be touched on in an effort to introduce students to the fullness and variety of the art of theatre.

THTR 111 Prof. O'Steen
(CA)Introduction to Acting 3 credits
This first course in a three-course sequence is intended as an introduction to the development and training of the actor, covering the fundamental elements of the actor's craft, including internal and external technique, character analysis, and vocal/physical warmups. These elements will be practically applied in various in-class exercises and rehearsed performance work. The subject of auditions will also be covered.

THTR 112 Prof. Larsen
Introduction to Technical Theatre 4 credits
A study of materials, equipment, and techniques used in the construction and finishing of scenery. Also includes principles of lighting and sound and special effects for the stage. Forty hours of lab work in one of the following areas: scenery, costumes, lighting, or props; and participation on a crew for a major University Players' production will be required.

THTR 120 Staff
(CA)Creative Drama and Youth Theatre 3 credits
An introduction to the history, theory, and practice of both theatre for youth and creative drama in the United States. Representative plays will be read and productions attended and reviewed. The course will explore various applications of creative drama techniques, including their use in rehearsal and in the classroom.

THEATRE

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR	THTR 110-111	Intro. Theatre-Intro. Acting	3	3
MAJOR	THTR 112	Intro. Tech. Theatre	4	
COGNATE	ENLT 122	Intro. Drama		3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL102	Computing and Information Literacy	3	
GE QUAN	QUAN ELECT	Quantitative Reasoning Elective		3
GE PHIL-T/RS	PHIL 120-T/RS 121	Intro. to Philosophy-Theology I	3	3
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1	1
			17	**16**
		SECOND YEAR		
MAJOR	THTR 211-212	Theatre History I & II	3	3
MAJOR	THTR 213	Design for the Theatre		3
MAJOR	THTR 280	Production Laboratory	1	
COGNATE	ELECT[2]	Elective-Dramatic Literature	3	
GE S/BH	S/BH ELECT	Social/Behavioral Elective	3	
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE HUMN	HUMN ELECT	Humanities Elective		3
GE PHED	PHED ELECT	Physical Education	1	1
			17	**16**
		THIRD YEAR		
MAJOR	THTR 311	Directing I		3
MAJOR	THTR ELECT[1]	Electives	3	3
MAJOR	THTR 280	Production Laboratory	1	1
COGNATE	ELECT[2]	Elective	6	3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
GE S/BH	S/BH ELECT	Social/Behavioral Elective		3
GE ELECT	ELECT	Free Electives	3	3
			16	**16**
		FOURTH YEAR		
MAJOR	THTR ELECT	Electives	3	3
MAJOR	THTR 280	Production Laboratory	1	1
COGNATE	ELECT	Cognate Electives	3	6
GE ELECT	ELECT	Free Electives	6	6
GE HUMN	HUMN ELECT	Humanities Elective	3	
			16	**16**

Total: 130 CREDITS

[1] Major electives: the Theatre major must select four electives from the following: any THTR course at the 200 level or higher; WRTG 215, WRTG 315, and ENLT courses 200 level or higher that qualify as dramatic literature courses.

[2] Cognate electives must include two courses in dramatic literature; one of these must be ENLT 122.

THTR 210 Prof. O'Steen
Intermediate Acting 3 credits
(Prerequisite: THTR 111 with a grade of B- or higher) This second in a three-course sequence builds on the fundamentals of the acting process and focuses on further exploration of internal acting technique. Stanislavski-based and/or other modern and contemporary acting systems are explored through exercises, written analysis, and scene/monologue study. There is an emphasis on ensemble acting in the classroom, rehearsal, and production.

THTR 211 Staff
(CL)Theatre History I 3 credits
A chronological study of western theatre from ancient Greek drama to seventeenth-century British drama. A selection of plays from representative playwrights will be read and discussed with an emphasis on the social, cultural, and theatrical contexts within which these playwrights lived and worked.

THTR 212 Staff
(CL)Theatre History II 3 credits
A chronological study of western theatre from seventeenth-century French and Spanish, through Restoration and eighteenth-century British drama, up to nineteenth-century German, Scandinavian, and Russian drama. A selection of plays from representative playwrights will be read and discussed, with an emphasis on the social, cultural, and theatrical contexts within which these playwrights lived and worked.

THTR 213 Prof. Larsen
(CA)Design for the Theatre 3 credits
(Prerequisite: THTR 112 with a grade of B- or higher) An introduction to the various design and production elements in theatre. Scenery, lighting, costumes, projections, props and sound will be explored. Students participate in the design elements of the University productions.

THTR 214 Prof. Larsen
Drama Practicum 3 credits
(Prerequisite: any other course that may be counted in the Theatre minor) Work on one of the major aspects of producing a play: acting, costuming, set construction, lighting, publicity, and box-office management.

THTR 280 Prof. Larsen
Production Laboratory 1 credit
This course is designed to provide the Theatre major with practical experience in technical theatre through a variety of production-related jobs including, but not limited to, props master, master electrician, sound designer, assistant technical director, assistant stage manager, and running crew. Students must do a minimum of 40 hours of production work and complete the assigned tasks on deadline to receive credit. May be taken for credit up to five times.

THTR 310 Staff
Theories of Theatre 3 credits
Students will study the theories of theatre advanced in the writing of Diderot, Archer, Stanislavsky, Vakhtangov, Brecht, Copeau, Artaud, Grotowski, Brook, and Schechner.

THTR 311 Prof. O'Steen
Directing I 3 credits
(Prerequisite: THTR 111 with a grade of B- or higher or permission of instructor) An introduction to the basic mechanics of stage directing with an emphasis on the tools needed to approach the staging of a play, such as playscript analysis, interpretive skills, organizational skills, communication and leadership skills, developing a ground-plan, blocking, and composition/picturization. Several plays will be read and analyzed. Student directors will select, cast, and direct a short scene for performance.

THTR 313 Prof. Larsen
Set Design for the Theatre 3 credits
(Prerequisite: THTR 213 with a grade of B- or higher) An exploration of the basic crafts of the theatrical set designer. Concentration on developing one's personal vision and interpretive skills through script analysis. Practice in sketching, drafting, painting, collage, model making and typical stage construction. Introduction to environmental theatre.

THTR 370 Prof. Larsen
Technical Theatre: 3 credits
Special Topics
Topic and prerequisites will be announced prior to preregistration.

THTR 371 Prof. Larsen
Theatre Design: 3 credits
Special Topics
Topic and prerequisites will be announced prior to preregistration.

THTR 372 Staff
Dramatic Literature: 3 credits
Special Topics
Topic and prerequisites will be announced prior to preregistration.

THTR 373 Prof. O'Steen
Acting: Special Topics 3 credits
(Prerequisite: THTR 111) Topic and prerequisites will be announced prior to preregistration. Past topics include Actor's movement, voice and speech, stage combat.

THTR 380 Staff
Advanced Production Lab 2 credits
(Prerequisite: permission of the instructor and typically 2 credits of THTR 280 with a grade of B- or higher) *May be taken only once.* This course is designed to offer the advanced student practical experience in a variety of production-related work including, but not limited to, stage management, theatre design, directing, dramaturgy, playwriting, or performance of a major role (as determined by the faculty) in the University Players Mainstage Season. Students must do a minimum of 80 hours of production work and complete the assigned tasks on deadline to receive credit.

THTR 382-383, 482-483 Staff
Independent Study in Theatre 3 credits
A tutorial program open to junior and senior students who have completed appropriate lower-division coursework.

THTR 410 Prof. O'Steen
Advanced Acting 3 credits
(Prerequisite: THTR 210 with a grade of B- or higher) This final course in the three-course acting sequence focuses on external acting techniques. There is an exploration of physical characterization and the use of the actor's body to achieve this physical transformation. This work builds on the student's self-knowledge and experience with internal technique through the use of exercises, written analysis, and scene/monologue study.

THTR 411 Prof.O'Steen
Directing II 3 credits
(Prerequisite: THTR 311 with a grade of B- or higher or permission of instructor) Building on techniques and skills learned in Directing I, this course concentrates primarily on the development of the young director's style by focusing on the development of a production concept and studying various rehearsal techniques, directing methods, directing styles. Methods of coaching actors and development of the director-actor relationship are also covered. Practical application of course work through direction of a 20-30 minute one-act or cutting for public performance in the Director's Workshop as part of the University Players Studio Season.

THTR 480 Staff
Internship Variable credit
Theatre majors or minors can receive credits for a variety of on-the-job work experience. Approval must be obtained beforehand from the supervising faculty member, chairperson, and dean.

WRITING

All Writing courses have WRTG 107 (or equivalent) as prerequisite. Students who take WRTG 105-106 may not take WRTG 107.

WRTG 104 Staff
Written Communication 3 credits
(Formerly ENGL 105) An introduction to non-expository forms of writing. This course does not count toward the Writing Track or the Writing minor.

WRTG 105 Staff
College Writing I 3 credits
(Placement into 105 required) This course offers instruction in structuring argumentative essays and concentrates on defining and focusing problems, creating arguments, and providing evidence in academic essays. This course is the first of a two-semester sequence (WRTG 105 and 106). It does not count toward the Writing Track or the Writing minor. *Photocopying fee.*

WRTG 106 Staff
(D)College Writing II 3 credits
(Prerequisite: WRTG 105) This course continues instruction in structuring argumentative essays, reviews the work in WRTG 105, and concentrates on providing support for arguments and elements of style and grammar. This course is the second semester of a two-semester sequence (WRTG 105-106). The sequence fulfills the General Education Writing Requirement and receives one course credit for cultural diversity. This course does not count toward the Writing Track or the Writing minor. *Photocopying fee.*

WRTG 107 Staff
Composition 3 credits
A study of expository and argumentative prose, and the processes and techniques effective writers use. Classical rhetorical strategies, a variety of grammatical and theoretical approaches, and (often) computer programs are employed to help students understand composition as a means of communication and as a mind-shaping discipline in the liberal-arts tradition. This course does not count toward the Writing Track or the Writing minor; it may not be taken by students who have completed WRTG 105-106. *Photocopying fee.*

WRTG 210 Dr. Rakauskas, Prof. Hill
Advanced Composition 3 credits
The purpose of this course is to review, practice and apply the principles of a rhetoric of order, stressing invention, disposition, style, tone and theme.

WRTG 211 Dr. Fraustino
Technical and Business Writing 3 credits
A course in scientific or technical writing designed to help students improve their writing skills in preparation for their professions. Specialized training is offered in writing of proposals, reports, instructions, letters, abstracts, resumes, etc.

WRTG 212 Dr. McInerney
Writing for the Law 3 credits
This course aims to help the student develop the writing skills that will be of particular value to prospective lawyers. Readings, exercises, and assignments stress precision and conciseness as well as careful argument. The course should also be valuable to any student who wants to improve his/her analytical ability and expressive capacity. *Photocopying fee.*

WRTG 213 Prof. Schaffer
Fiction Writing I 3 credits
Designed to increase students' skills in writing short prose fiction, this course augments frequent practice in the genre with attention both to theories of short-story composition and to diverse examples. In a workshop atmosphere, students will read and discuss one another's work as well as fiction by well-known authors. *Photocopying fee.*

WRTG 214 Staff
Nonfiction Writing I 3 credits
Designed to develop skills in writing creative nonfiction prose, this course employs a workshop format and requires intensive reading and analysis of student work as well as work by noted practitioners such as Orwell, Baldwin, Didion, and Dillard. *Photocopying fee.*

WRTG 215 Dr. Robbins
Playwriting I 3 credits
This course is designed to teach students the craft and technique of writing a play. The students will explore their own abilities through play, writing and will be responsible for writing a full one-act play or one act of a two- or three-act play. This course may be counted toward the Theatre Track, major or minor. *Photocopying fee.*

WRTG 216 Prof. Hill
Poetry Writing I 3 credits
Theory and practice of writing poetry with attention to modern and contemporary tradition and criticism. Opportunity for sustained, serious response to student work and practical advice on markets, publishing procedures, etc. The course employs a workshop format and encourages serious reading and discussion of poetry. *Photocopying fee.*

WRTG 217 Staff
Scriptwriting 3 credits
Introduction to the film and television format for dramatic productions of varying lengths. Documentaries are also studied. Students not only master technique but also explore development of plot and character. Four major assignments and several short projects are required. This course may be counted toward the Theatre Track, major or minor. *Photocopying fee.*

WRTG 218 Staff
Writing the Web 3 credits
This course is designed for students who understand the basic structure of argument and strategies for constructing those arguments and are ready for the challenge of writing online. To prepare for writing online, we will discuss ethical issues of conversing with a national or international audience. In the course, students will learn to analyze both the visual and textual content of e-mail, Usenet Newsgroups, MUs, and web sites. They will also create a portfolio or webfolio of their work.

WRTG 310 Dr. Rakauskas
Written Communication; Strategies for Teaching Writing 3 credits
This course for English/Education majors emphasizes strategies for taking students into, through, and beyond the writing process. Students have many opportunities to plan and to design writing assignments, to conduct writing sessions, and to evaluate written composition. *Photocopying fee.*

WRTG 313 Prof. Schaffer
Fiction Writing II 3 credits
(Prerequisite: WRTG 213) Advanced workshop augments intensive student writing assignments with theory of fiction composition and diverse examples. *Photocopying Fee.*

WRTG 314 Staff
Nonfiction Writing II 3 credits
(Prerequisite: WRTG 214) Advanced workshop augments intensive student writing assignments with discussion and analysis of creative nonfiction by various hands. *Photocopying fee.*

WRTG 315 Dr. Robbins
Playwriting II 3 credits
(Prerequisite: WRTG 215) An advanced workshop in playwriting which will include intensive reading and writing, this course will build on skills acquired in Playwriting I, and encourage students to explore theatrical styles beyond realism. This course may be counted toward the Theatre Track, major, or minor. *Photocopying fee.*

WRTG 316 Prof. Hill
Poetry Writing II 3 credits
(Prerequisite: WRTG 216) Advanced workshop on practice and theory of writing poetry. The course encourages extensive reading and intensive writing. *Photocopying fee.*

WRTG 382-383, 482-483 Staff
Guided Independent Study Variable credit
A tutorial program open to junior and senior students who have completed appropriate lower-division coursework. Context determined by genre and mentor.

WRTG 480 Staff
Internship Variable credit
English majors and/or Writing minors can receive internship credits for a variety of on-the-job work experiences. Approval must be obtained beforehand from the supervising faculty member, chairperson, and dean.

ENVIRONMENTAL SCIENCE

DR. MICHAEL C. CANN (Chemistry Department),
DR. MICHAEL D. CAREY (Biology Department), Program Co-Directors

The Environmental Science major is an interdisciplinary program of the Biology and Chemistry Departments at The University of Scranton. The Environmental Science major has the following objectives: 1. To prepare students for entry-level positions (in the public or private sector) in the broad field of environmental analysis, compliance, and technology; 2. To prepare students for advanced study in environmental science; 3. To provide a sufficiently comprehensive science and liberal arts background to allow students to pursue advanced training or work in other fields that deal with environmental issues, e.g., environmental law, environmental health, and environmental regulation in business and industry.

The Environmental Science program provides a rigorous and comprehensive grounding in the biological, chemical, and physical aspects of the natural environment, and in the analytical and instrumental techniques used to investigate environmental problems. Upper-class students may choose to focus more closely on either the chemical or biological aspects of environmental science, and must complete either an undergraduate research project or an internship in environmental science. The program also is designed to expose students to the social, political, regulatory, economic, and ethical concerns that are commensurate with defining and addressing environmental issues in today's world.

The Environmental Science curriculum appears below:

I. Required courses in the major and cognate include courses in Biology, Chemistry, Environmental Science, Natural Science, Mathematics, and Physics. Specific courses and the recommended sequence in which they should be taken are indicated on p. 144.

II. Electives in the major: the student must complete four courses from among the following; at *least* one course must be chosen from each group:

Group A:

CHEM	342	Environmental Toxicology	3 credits
CHEM	344	Environmental Geochemistry	3 credits
CHEM	350	General Biochemistry I	3 credits
CHEM	352	Chemical Toxicology	3 credits

Group B:

BIOL	195	Tropical Biology	3 credits
BIOL	250	Microbiology	5 credits
BIOL	272	Invertebrate Biology	5 credits
BIOL	273	Marine Ecology	3 credits
BIOL	349	Plant Physiology	5 credits
BIOL	370	Animal Behavior	4½ credits
BIOL	375	Evolution	3 credits
BIOL	471	Applied Ecology	3 credits
BIOL	472	Systems Ecology	3 credits
BIOL	473	Estuarine Ecology	5 credits

III. General education courses: In fulfilling the GE requirements, students are *strongly* encouraged to enroll in:

PHIL	213	Environmental Ethics	3 credits
PS	230	Environmental Policy	3 credits
ECO	103	Economics of Environmental Issues	3 credits

Most of the required and recommended courses in the Environmental Science major reside in other departments, and their descriptions can be found under the appropriate departmental listing. Three courses, specific to the Environmental Science program, are described on the following page.

ENVIRONMENTAL SCIENCE

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
MAJOR (GE NSCI)	CHEM 112-113	Gen. Analytical Chem I-II	4½	4½
MAJOR	BIOL 141-142	General Biology I-II	4½	4½
MAJOR	NSCI 201	Science and Human Environment		3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Phys. Ed.	1	1
			16	**16**
		SECOND YEAR		
MAJOR	CHEM 232-233	Organic Chemistry I-II	4½	4½
MAJOR	BIOL 371	Ecology	5	
MAJOR	BIOL 379	Biostatistics		3
COGNATE (GE QUAN)	MATH 103-114[1]	Pre-Calculus-Analysis I	3-4	4
GE HUMN	HUMN ELECT	Humanities Elective		3
GE PHIL-T/RS	PHIL 120-T/RS 121	Intro to Philosophy-Theology I	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16½-17½	**18½**
		THIRD YEAR		
MAJOR	CHEM 340	Environmental Chemistry	3	
MAJOR	CHEM 370	Instrumental Analysis		5
MAJOR	MAJOR ELECT	Elective		3-5
GE S/BH	POL SCI 230	Environmental Policy	3	
GE S/BH	ECO 103	Economics of Envir. Issues		3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE ELECT	PHYS 120-121[2]	General Physics	4	4
			16	**18-20**
		FOURTH YEAR		
MAJOR	MAJOR ELECT	Elective	3-5	3
MAJOR	MAJOR ELECT	Elective	3-5	
MAJOR	ESCI 480 or 493	Research or Intern. in Env. Sci.	1½	
MAJOR	ESCI 481 or 494	Research or Intern. in Env. Sci.		1½
MAJOR	ESCI 440-441	Topics in Environmental Sci.	1	1
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
GE HUMN	HUMN	Humanities Electives	3	3
GE S/BH	S/BH ELECT	Social/Behavioral Elective		3
GE ELECT	ELECT	Free Electives		6
			14½-18½	**17½**

Total: 130-137 CREDITS

[1] Students entering exempt from MATH 103 may select: Computer Science I (CMPS 134) or Analysis II (MATH 221).
[2] Or Elements of Physics I and II (PHYS 141-141)

ESCI 440-441 Staff
Topics in 2 credits
Environmental Science
(Prerequisite: Senior Standing in ESCI major or permission of instructor) One credit/semester. Discussions of current and significant environmental science issues.

ESCI 480-481 Dr. Cann
Internship in 3 credits
Environmental Science
(Prerequisite: Senior Standing in ESCI major or permission of instructor) 1.5 credits/ semester. Student to work with private firm, advocacy group, or governmental agency on an environmental issue or technique that involves application of scientific principles to monitor, test, or develop/implement solutions to environmental problems. Project and institutional sponsor subject to approval of the Environmental Science Committee; final project report required.

ESCI 493-494 Dr. Carey
Research in 3 credits
Environmental Science
(Prerequisite: senior status in ESCI major or permission of instructor) 1.5 credits/semester. Individual study and research of a specific environmental problem. Mentored by a Biology or Chemistry faculty member.

FOREIGN LANGUAGES AND LITERATURES

DR. ROBERT A. PARSONS, Chairperson

The program of the Foreign Language Department is designed to enable students to read, write, speak and comprehend one or more foreign languages; to think and express themselves logically, precisely and critically in one or more foreign languages; to acquire skills in literary criticism by reading representative foreign authors; to gain insight into the evolution of the culture and civilization of foreign peoples as reflected in their literature.

The Bachelor of Arts program in Classical Languages gives students a solid foundation in Latin and Greek to engender an appreciation of the liberal aspects of Classical Studies. Classics majors are encouraged to take their junior year abroad at Loyola University's Rome Center of Liberal Arts with which The University of Scranton is affiliated.

Foreign Language majors and students pursuing teaching certification must complete 36 credits in one language beginning with the intermediate level if it is modern, and the elmentary level if it is classical. Modern Language majors normally take at least 12 credits in a second language, either modern or classical, as their cognate. A double major may be pursued by taking 36 credits in one language, beginning with the intermediate or elementary level, and by satisfying the major and cognate requirements of another department. The placement of students at a particular foreign-language level is the responsibility of the department.

The department urges students to study abroad during their junior year. In addition, it strongly recommends that students who spend the entire junior year abroad plan their studies carefully, so that they will be able to take at least one course per semester in their major language during the senior year.

MINORS IN LANGUAGE

FRENCH MINOR: To minor in French, students must take 18 credits beginning at the intermediate level or higher.

GERMAN MINOR: To minor in German, students must take 18 credits beginning at the intermediate level or higher.

GREEK MINOR: To minor in Greek, students must take 18 credits beginning at the elementary level or higher.

ITALIAN MINOR: To minor in Italian, students must take 18 credits beginning at the elementary level or higher.

LATIN MINOR: To minor in Latin, students must take 18 credits beginning at the elementary level or higher.

PORTUGUESE MINOR: To minor in Portuguese, students must take15 credits, consisting of PORT 110 (intensive elementary Portuguese), PORT 210 (intensive intermediate Portuguese), and two advanced Portuguese courses.

SPANISH MINOR: To minor in Spanish, students must take18 credits beginning at the intermediate level or higher.

Minors in JAPANESE and RUSSIAN are sometimes possible, depending upon the availability of courses in these languages. They consist of 18 credits beginning at the elementary level or higher.

Students who minor in two languages may begin at any level and must complete a total of 24 credits distributed equally between the two languages.

Elementary courses in any language are not open to students who have studied two or more years of the same language in high school. Exceptions to this policy must be approved by the Department of Foreign Languages and Literatures.

FOREIGN LANGUAGE

	Dept. And No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR (GE HUMN)	LANG[1] 211-212 or 311-312	Intermediate or Conversation/Composition	3	3
COGNATE	LANG 101-102 or 211-212	Second Modern or Classical Language	3	3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE QUAN	MATH 106 or 107	Quantitative Methods I or II		3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE PHIL-T/RS	PHIL 120-T/RS 121	Intro. to Phil.-Theology I	3	3
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1	1
			16	**16**
		SECOND YEAR		
MAJOR	LANG 311-312[1]	Adv. Conversation/ Comp	3	3
COGNATE	LANG 211-212 or 311-312	Second Modern or Classical Language	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE PHIL-T/RS	PHIL 210 - T/RS 122	Ethics-Theology II	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
		THIRD YEAR		
MAJOR	LANG ELECT[2]	Advanced Lang. Electives	6	6
COGNATE	LANG-ELECT	Language Elective-Elective	3	6
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
GE S/BH	S/BH ELECT	Social/Behavioral Electives	3	3
GE ELECT	ELECT	Free Electives	3	3
			18	**18**
		FOURTH YEAR		
MAJOR	LANG ELECT	Advanced Lang. Electives	6	6
COGNATE	ELECT	Cognate Electives	3	3
GE ELECT	ELECT	Free Electives	6	6
			15	**15**
				Total: 130 CREDITS

[1] Students who begin language at the Advanced (311) level will take 6 fewer credits in the major and 6 more credits in the COGNATE or FREE ELECTIVE area in either the junior or senior year. In their second year, they will choose advanced language electives.

[2] Spanish majors will take SPAN 320, SPAN 321, and 3 of the following 4 courses: SPAN 313, SPAN 314, SPAN 330, and SPAN 331.

INTERNATIONAL LANGUAGE-BUSINESS

The major in International Language-Business is a professionally oriented program. Its purpose is to make language study a more career-structured discipline by providing students with the opportunity to acquire a liberal education while, at the same time, taking courses specifically relevant to a business enterprise.

In order to bridge the communication gap between multinational businesses and the lack of functional language skills often exhibited by the personnel representing them, specialized language courses focusing on the business terminology and cultural setting of the countries in question complement the regular language and business courses in this major.

The department urges students to study abroad during their junior year. In addition, it strongly recommends that students who spend the entire junior year abroad plan their studies carefully, so that they will be able to take at least one course per semester in their major language during the senior year. Students who pursue a business internship will earn credits in addition to the 130 credits stipulated for the program, unless there is room in the free area.

	Dept. And No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR (GE HUMN)	LANG[1] 211-212 or 311-312	Inter. or Conversation/Composition	3	3
COGNATE	LANG 101-102 or 211-212	Second Language	3	3
GE SPCH-WRTG	COMM 100-WRTG 107	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE QUAN ELECT	MATH 106 or 107	Quantitative Methods I or II		3
GE PHIL - T/RS	PHIL 120 - T/RS 121	Intro. to Philosophy-Theology I	3	3
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1	1
			16	**16**
		SECOND YEAR		
MAJOR	LANG 311-312[1]	Conversation/ Composition	3	3
MAJOR	ACC 253	Financial Accounting	3	
COGNATE	LANG 211-212 or 311-312	Second Modern or Classical Lang.	3	3
GE HUMN	HUMN ELECT	Humanities Elective		3
GE S/BH	S/BH ELECT	ECO 153-154	3	3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
		THIRD YEAR		
MAJOR	LANG 321-322[2]	Advanced Stylistics	3	3
MAJOR	LANG ELECT	Advanced Language Electives	3	3
MAJOR	MGT 351	Principles of Management I		3
MAJOR	ECO/IB 351	Environment of Internt'l Bus.		3
MAJOR	FIN 351	Intro. to Finance	3	
GE ELECT	ELECT[3]	Elective	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE PHIL-T/RS	PHIL-T/RS ELECT[4]	Philosophy or T/RS Elective	3	
			18	**18**
		FOURTH YEAR		
MAJOR	LANG 319	Business Language		3
MAJOR	LANG ELECT	Advanced Language Electives	6	3
MAJOR	MKT 351	Intro. to Marketing	3	
MAJOR	INT ELECT	One of MGT 475, MKT 475 ECO 375, FIN 475, IB 476, IB 477	3	
GE HUMN	HUMN ELECT	Humanities Elective		3
GE ELECT	ELECT[3]	Electives	3	6
			15	**15**

Total: 130 CREDITS

[1] Students who begin their major language level at the 311 level take 6 fewer credits in the major and 6 more credits in the cognate or free area. In their second year, they will choose advanced language electives.

[2] Students whose first language is Spanish will take SPAN 320, SPAN 321, and 3 of the following 4 courses: SPAN 313, SPAN 314, SPAN 330 and SPAN 331 in their advanced language electives area.

[3] PS 212, PS 240 and ACC 254 are recommended GE electives.

[4] A course focusing on the ethics of business is recommended.

MODERN LANGUAGES

PLEASE NOTE: Foreign Languages and Literatures courses with a title prefixed by an asterisk meet three hours per week in class and include activities inside and/or outside the classroom that involve Language Learning Center (language lab) resources.

FRENCH

FREN 101-102 Staff
***(CF)Elementary French** 6 credits
Designed to impart a good basic foundation in comprehending, speaking, reading, and writing the French language. Designed primarily for students with little or no background in the French language.

FREN 203 Staff
French Cultural Heritage 3 credits
This course aims to develop understanding of the culture, literature and civilization of France. Representative readings from different periods. Lectures, discussions and readings in English.

FREN 211-212 Staff
***(CF, D)Intermediate French** 6 credits
(Prerequisites: FREN 101-102 or equivalent, as determined by placement exam) Designed to give greater scope and depth to the student's knowledge of the grammar and style of the French language. Taught in French. Completion of the second half of the intermediate sequence satisfies one semester of the cultural diversity requirements (D).

FREN 239 Dr. Hanks
(CL, D)French ChristianThinkers 3 credits
(Prerequisite: An Introduction to Literature course in the English or Foreign Language departments) Readings and analysis of writings by French Christians from the Middle Ages through the twentieth century. Taught in English, but credit in French available for students able to read and write in French, who meet one additional class period per week with instructor.

FREN 311 Staff
***(CF, D)French Conversation** 3 credits
(Prerequisites: FREN 211-212 or equivalent, as determined by placement exam) Intensive French conversation, emphasizing cross-cultural comparisons and development of self-expression in French. Taught in French.

FREN 312 Staff
***(CF,W)French Composition** 3 credits
(Prerequisites: FREN 211-212 or equivalent, as determined by placement exam) An intensive course in writing in French, stressing grammar, writing analysis and composition. Taught in French.

FREN 313-314 Staff
(CL, D)Survey of French Literature 6 credits
(Prerequisites: FREN 311-312 or equivalent) A review of French literature from the *chanson de geste* to the contemporary period.

FREN 315-316 Staff
***(D) Survey of French Culture and Civilization** 6 credits
(Prerequisites: FREN 311-312, or equivalent) A review of the geography, history, art and other accomplishments that comprise the heritage of the French-speaking people worldwide, from antiquity to the present.

FREN 319 Staff
***Business French** 3 credits
(Prerequisites: FREN 311-312 or equivalent) Overview of the spoken and written language of the French business world. Formalities and conventions of letter writing, banking, import/ export, and other commercial transactions. Analysis of terminology from business-related areas such as finance, insurance and international commerce within a contemporary cultural setting.

FREN 320 Staff
(CL)Introduction to French Literature 3 credits
(Prerequisites: FREN 311-312 or equivalent) An introduction to the principal literary genres of poetry, novel, short story, essay and drama, through analysis of representative works in the French tradition. Strongly recommended as a prerequisite for all upper-division literature courses in French.

FREN 321-322 Staff
***(D,W) Advanced French Stylistics** 6 credits
(Prerequisites: FREN 311-312 or equivalent) Designed to strengthen the speaking and writing skills. Advanced use of grammar and syntax.

FREN 421 Staff
Medieval and Renaissance French Studies 3 credits
(Prerequisites: FREN 311-312 or equivalent) Selected literary works from the eleventh century to the late Renaissance.

FREN 423 Dr. Petrovic
Seventeenth-Century French Studies 3 credits
(Prerequisites: FREN 311-312 or equivalent) Literary, philosophical, and social expression from 1610 to 1715.

FREN 425 Dr. Petrovic
Eighteenth-Century French Studies 3 credits
(Prerequisites: FREN 311-312 or equivalent) The Enlightenment from 1715 to 1789.

FREN 427 Dr. Petrovic
Nineteenth-Century French Novel 3 credits
(Prerequisites: FREN 311-312 or equivalent) The development of prose narration as reflected in the literary movements of the age.

FREN 429 Dr. Petrovic
Nineteenth-Century French Poetry 3 credits
(Prerequisites: FREN 311-312 or equivalent) The development of poetic forms from the romantic to the symbolist movement inclusively.

FREN 430 Dr. Hanks
French Women Writers 3 credits
(Prerequisites: FREN 311-312 or equivalent) Women's view of themselves and the world as reflected in their literary creations. Cross-listed with Women's Studies Concentration. (See Women's Studies Concentration section.)

FREN 431 Dr. Petrovic
(D,W) Twentieth-Century French Novel 3 credits
(Prerequisites: FREN 311-312 or equivalent) The development of prose narration from the Dreyfus case to the present.

FREN 432 Dr. Hanks
French Short Story 3 credits
(Prerequisites: FREN 311-312 or equivalent) Principal practitioners of the short story in French, including contemporary authors.

FREN 433 Dr. Petrovic
Twentieth-Century French Drama 3 credits
(Prerequisites: FREN 311-312 or equivalent) The development of dramatic forms from the *Theatre Libre* to the present.

FREN 434 Dr. Hanks
French Novel Into Film 3 credits
(Prerequisites: FREN 311-312 or equivalent) Examination of the transformations effected in major French novels adapted for the screen, and exploration of alternative solutions to the problems posed.

FREN 435 Staff
The French Theater 3 credits
(Prerequisites: FREN 311-312 or equivalent) An inquiry into the various forms of the French theater through a study of significant representative works from different periods.

FREN 437 Dr. Zanzana
Francophone African Literature 3 credits
A study of Francophone African Literature from the Maghreb to the African diaspora, with emphasis on main literary currents, ideology, political climates, linguistic traditions, and literary manifestations in each country.

FREN 482-483 Staff
Guided Variable credit
Independent Study
(Prerequisites: FREN 311-312 or equivalent) A tutorial program open to Juniors and Seniors only. Content determined by mentor.

GERMAN

GERM 101-102 Staff
***(CF)Elementary German** 6 credits
(Prerequisite: none) A complete course in the fundamentals of the German language. Emphasis on reading of graded texts, with written, oral and aural exercises. Designed for students with little or no background in the German language.

GERM 211-212 Staff
***(CF, D)Intermediate German** 6 credits
(Prerequisites: GERM 101-102 or equivalent) Reading from modern authors of moderate difficulty. Oral and written exercise. Systematic review of German grammar.

GERM 213-214 Dr. Kamla
***Introduction to** 6 credits
Business German
(Prerequisites: GERM 101-102 or equivalent) Specialized intermediate-level course for students who wish to focus their skills on the language of the business world. Oral and written exercises. Systematic review of German grammar.

GERM 295 Reverends Pantle
(D)German Culture and Lally
and Language 3 credits
A three-credit intersession course to Gemany, Austria and Switzerland. Credits may be used in Free Area and for the Cultural Diversity credit but not for German major or minor. Course offers the opportunity to compare the German and American cultures. Study of history, music, political science, language and modern attitudes. Team-taught by University of Scranton faculty from the Departments of Foreign Languages, Political Science, History and Philosophy.

GERM 311-312 Staff
***(CF,W)Advanced German** 6 credits
Composition and Conversation
(Prerequisites: GERM 211-212 or equivalent) Selected texts in prose and poetry. Advanced practice in conversation and composition. Survey of German grammar.

GERM 313-314 Dr. Kamla
(CL, D)Survey of German 6 credits
Literature and Culture
(Prerequisites: GERM 311-312 or equivalent) A survey of German literature from the eleventh century to the contemporary period, with special emphasis on the main intellectual currents as well as the social and political developments.

GERM 319 Dr. Kamla
***Business German** 3 credits
(Prerequisites: GERM 311-312 or equivalent) Overview of the spoken and written language of the German business world. Formalities and conventions of letter writing, banking, import/export, and other commercial transactions. Analysis of terminology from business-related areas such as finance, insurance and international commerce within a contemporary cultural setting.

GERM 321-322 Staff
***(W)Advanced Stylistics** 6 credits
(Prerequisites: GERM 311-312 or equivalent) Advanced study of syntax and semantics aimed at the development of stylistic sensitivity. Interdisciplinary textual analyses (business and commercial German, communications media, the sciences and humanities) for further practice in composition and conversation.

GERM 421 Dr. Kamla
German Classicism and 3 credits
Romanticism
(Prerequisites: GERM 311-312 or equivalent) A study of the literature of the eighteenth (Goethe, Schiller, Holderlin) and early nineteenth centuries (Kleist, Hoffmann, Novalis) in their Classical and Romantic contexts.

GERM 423 Dr. Kamla
Realism and Naturalism 3 credits
(Prerequisites: GERM 311-312 or equivalent) A study of the works of late nineteenth-century authors, such as Storm, Fontane and Keller.

GERM 425 Dr. Kamla
German Literature up to 1945 3 credits
(Prerequisites: GERM 311-312 or equivalent) An in-depth study of such authors as Brecht, Mann, Kafka and Rilke.

GERM 427 Dr. Kamla
Postwar German Literature 3 credits
(Prerequisites: GERM 311-312, or equivalent) Concentration on contemporary authors such as Frisch, Durrenmatt, Grass and Boll, as well as representative authors from the former East Germany.

GERM 482-483 Staff
Independent Study Variable credit
(Prerequisites: GERM 311-312 or equivalent) A tutorial program open to Junior and Senior students only. Content determined by mentor.

HEBREW

HEBR 101-102 Staff
(CF)Biblical Hebrew 6 credits
A systematic introduction to the fundamentals of Biblical Hebrew grammar and to certain aspects of ancient Semitic language and culture.

Note: Additional work in Italian, Japanese, Portuguese, and Russian is available by arranging independent study and/or foreign study.

ITALIAN

ITAL 101-102 Staff
***(CF)Elementary Italian** 6 credits
Introduction to the Italian language. Designed for beginners.

ITAL 207 Dr. Picchietti
(CL, D,W)Italian Women's 3 credits
Writing in Translation
This course addresses a multitude of women's voices and experiences in Italy in the twentieth century, as expressed in works of prose, poetry, theater, and film. Not all the artists subscribe to a feminist ideology, but their works share an interest in issues concerning women. Students will examine the styles, themes, and historical contexts of the primary works. This course does not count toward the Italian minor or major.

ITAL 208 Dr. Picchietti
(D,W)Envisioning Italy 3 credits
From Novel to Film:
The Case of Neorealism
This course addresses the way in which authors and film makers have envisioned Italy in the Neorealist tradition. Students will analyze neorealist novels and their cinematic adaptations to determine similarities and differences in the artists' visions and interpretations of Italian society. This course does not count toward the Italian minor or major.

ITAL 209 Dr. Picchietti
Italian Cinema: 3 credits
From Origins to Present
An examination of the evolution of Italian cinema from the silent era to the present. Focus on the impact of historical events on the film industry, on the changing concerns and perspectives of film makers, and on the transformations in style and content in reaction to specific moments in Italian history. Films with subtitles. Taught in English. This course does not count for any minor or major requirement in foreign language.

ITAL 211-212 Staff
***(CF, D)Intermediate Italian** 6 credits
(Prerequisites: ITAL 101-102 or equivalent) Grammatical review, written and oral composition with selected cultural readings of intermediate difficulty. Completion of the second half of the intermediate sequence satisfies one semester of the cultural diversity requirements (D).

ITAL 295 Dr. Picchietti
(D)Italian Culture and Society 3 credits
An examination of Italian culture and society from the Renaissance to today. The course traces the development of Italian culture and society through primary texts, including essays, plays, short stories, films, opera and contemporary music, and sculpture and painting. The course includes travel to Italy.

ITAL 311-312 Staff
***(CF, D)Advanced Italian Composition and Conversation** 6 credits
(Prerequisite: ITAL 211-212 or equivalent) An intensive course in Italian composition and conversation with emphasis on detailed study of advanced grammatical and stylistic usage of the Italian language.

ITAL 313 Dr. Picchietti
(CL)Survey of Italian Literature I 3 credits
(Prerequisite: ITAL 311-312 or equivalent) This course, conducted in Italian, introduces students to nineteenth-and twentieth-century Italian literature and to significant literary movements and figures from these periods.

ITAL 314 Dr. Pichietti
(CL)Survey of Italian Literature II 3 credits
(Prerequisites: ITAL 311-312 or equivalent) This course, conducted in Italian, introduces students to Italian literature from the medieval period to the eighteenth century. It focuses on significant literary movements and figures from these periods.

JAPANESE

JAP 101-102 Staff
***(CF)Elementary Japanese** 6 credits
Development of the fundamental skills, listening, speaking, reading and writing, with emphasis on language performance. Emphasis on practical application of the basic skills for business-related activities. Relevant cultural aspects are introduced. Designed primarily for students with no background in the Japanese language.

JAP 211-212 Staff
***Intermediate Japanese** 6 credits
(Prerequisites: JAP 101-102 or equivalent) This course continues development of the four major skills: listening, speaking, reading and writing. Upon completion of the course students will understand all the basic concepts of the structure of the language.

PORTUGUESE

PORT 110 Dr. Ledford-Miller
***(CF)Intensive Elementary Portuguese** 4.5 credits
A video-based introduction to Brazilian Portuguese, this course covers basic grammar and vocabulary needed for listening, speaking, reading, and writing Portuguese. Students will also develop some cultural understanding of Brazil, Portugal, and other Lusophone countries. Meets 4 days a week. Offered fall only, even years.

PORT 210 Dr. Ledford-Miller
***(CF, D)Intensive Intermediate Portuguese** 4.5 credits
(Prerequisite: PORT 110 or equivalent) A continuation of elementary Portuguese. Students will refine, through oral and written activities, literary and other readings, and video, the skills learned in PORT 110. Cultural knowledge of the Lusophone world will also be further developed. Meets 4 days a week. Offered spring only, odd years.

The above courses meet the cognate language requirement and may serve as the basis for a 15-credit minor in Portuguese.

RUSSIAN

RUSS 101-102 Staff
***(CF)Elementary Russian** 6 credits
Primary emphasis on developing the skills of understanding, speaking, reading and writing Great Russian. A thorough and continual study of the Cyrillic alphabet is an integral part of the course's content.

RUSS 211-212 Staff
***Intermediate Russian** 6 credits
(Prerequisites: RUSS 101-102 or equivalent) This course continues development of the four major skills: listening, speaking, reading, and writing. It builds on the grammatical concepts learned in RUSS 101 and 102 and provides a solid foundation for the student interested in visiting Russia and/or in reading the Russian classics, contemporary literature, and newspapers.

SPANISH

SPAN 101-102 Staff
***(CF)Elementary Spanish** 6 credits
Fundamentals of grammar, pronunciation, conversation; suitable readings and written exercises. Designed primarily for students with little or no background in the Spanish language.

SPAN 203 Staff
(CL, D)Topics in Latin 3 credits
American Cultural Heritage
This course aims to develop understanding of the culture, literature and civilization of Latin America (i.e., Brazil and Spanish America). The topic and the region of Latin America studied may change, and thus this course may be repeated for credit when appropriate. Lectures, discussions and readings in English.

SPAN 211-212 Staff
***(CF, D)Intermediate Spanish** 6 credits
(Prerequisites: SPAN 101-102 or equivalent, as determined by placement exam) Grammatical review, written and oral composition with selected cultural readings of intermediate difficulty. Completion of the second half of the intermediate sequence satisfies one semester of the cultural diversity requirements (D).

SPAN/PS 295 Drs. Parsons and Kocis
(CF, D, S)Contemporary 6 credits
Mexican Culture and Language
(Prerequisite: Span 211 or higher) A six-credit intersession travel course to Guadalajara, Mexico, for three credits in Humanities (foreign-language area, intermediate and/or advanced level), three credits in the social sciences (political-science area), as well as cultural-diversity credit. The course is team-taught by University of Scranton faculty from the Departments of Foreign Languages and Political Science with assistance from Mexican faculty at UNIVA.

SPAN 296 Dr. Ledford-Miller
(CL, D)Topics in the Culture, 3 credits
Civilization, and
Literature of Latin America
This travel course aims to develop understanding of the culture, literature and civilization of Latin America (i.e., Brazil and Spanish America). The topic and the region of Latin America studied may change; thus, this course may be repeated for credit when appropriate. Lecture, discussions and readings in English. Students desiring credit in Spanish must do all readings and writing in Spanish as well as meet independently with the professor for discussion in Spanish.

SPAN 310 Staff
***Medical Spanish** 3 credits
(Prerequisites: SPAN 211-212 or equivalent) Designed for the student who plans to work in any area of health care, this course focuses on the needs and problems of Spanish-speaking patients. Students learn specialized vocabulary and improved communicative ability through conversation and composition and develop an increased awareness of health issues often of particular concern to Hispanics.

SPAN 311 Staff
***(CF, D)Spanish Conversation** 3 credits
(Prerequisites: SPAN 211-212 or equivalent, as determined by placement exam) Reading-based conversation stressing development of self-expression in Spanish. Practice in oral composition.

SPAN 312 Staff
***(CF,W)Spanish Composition** 3 credits
(Prerequisite: SPAN 212 or equivalent) Intensive writing practice stressing grammar, writing analysis, and composition.

SPAN 313 Staff
***Spanish Culture and Civilization** 3 credits
(Prerequisites: SPAN 311-312 or equivalent) An overview of the diverse historical, political, religious and artistic factors that have determined the cultural make-up of the peoples of the Iberian peninsula.

SPAN 314 Staff
***(D, W)Topics in Latin-American Culture and Civilization** 3 credits
(Prerequisites: SPAN 311-312 or equivalent) The course examines the diverse cultural, historical, linguistic, religious, and political features of Latin America. Content will vary according to the cultural/geographic region examined, and the course, therefore, may be repeated for credit.

SPAN 319 Dr. Parsons
***Business Spanish** 3 credits
(Prerequisites: SPAN 311-312 or equivalent) Overview of the spoken and written language of the Spanish business world. Formalities and conventions of letter writing, banking, import/export, and other commercial transactions. Analysis of terminology from business-related areas such as finance, insurance and international commerce within a contemporary cultural setting.

SPAN 320 Staff
(CL)Introduction to Literature 3 credits
(Prerequisites: SPAN 311-312 or equivalent) An introduction to the principal genres of literature (poetry, short story, essay, drama and novel) through analysis of representative works in the Hispanic tradition. Required prerequisite for all upper-division literature courses.

SPAN 321 Staff
***(W) Advanced Stylistics** 3 credits
(Prerequisites: SPAN 311-312 or equivalent) Designed to achieve more sophisticated use of Spanish, both orally and in writing. Includes intensive examination of compositions and translation exercises, as well as discussion of areas of particular difficulty for the non-native speaker (e.g., false cognates and unfamiliar structures).

SPAN 323 Staff
***Contemporary Issues** 3 credits
(Prerequisite: SPAN 311-312 or equivalent) A conversation-intensive course. Discussion and reports based on readings in a broad range of current periodicals and focusing on issues of relevance to the Hispanic world and to the particular career or interest areas of students.

SPAN 330 Staff
(CL)History of Spanish Literature 3 credits
(Prerequisite: SPAN 320) Study of Spanish literature from *Cantar de Mio Cid* to twentieth century, with emphasis on main literary currents in each century.

SPAN 331 Staff
(CL, D)Survey of Spanish-American Literature 3 credits
(Prerequisite: SPAN 320) A survey of Spanish-American literature from the sixteenth century to the present, with representative readings from each of the principal cultural areas.

SPAN 421 Staff
Twentieth-Century Spanish Drama 3 credits
(Prerequisite: SPAN 320) Peninsular drama of the twentieth century including dramatic forms after Buero Vallejo and new directions of Spanish theatre in the post-Franco era.

SPAN 422 Staff
Spanish-American Drama 3 credits
(Prerequisite: SPAN 320) Spanish-American drama from the late nineteenth century to the present, with emphasis on contemporary trends.

SPAN 430 Staff
Hispanic Women Writers 3 credits
(Prerequisite: SPAN 320) This course examines writing by Hispanic women, including prose, poetry, drama and essays, and investigates the social, political, aesthetic, and feminist contexts of their writing. Cross-listed with Women's Studies Concentration. (See Women's Studies Concentration section.)

SPAN 433 Staff
Hispanic Lyric Poetry 3 credits
(Prerequisite: SPAN 320) The development of lyric poetry in the Spanish-speaking world. Examples of early poetry in Spain and Spanish America are studied to establish an awareness of the Hispanic lyric tradition, but the main focus of the course is on twentieth-century Spanish America and such figures as Gabriela Mistral, Pablo Neruda, and Cesar Vallejo.

SPAN 482-483 Staff
Guided Variable credit
Independent Study
(Prerequisites: SPAN 311-312 or equivalent) A tutorial program open to Junior and Senior students only. Content determined by mentor.

SPAN 484 Staff
Topics in Hispanic Prose 3 credits
(Prerequisites: SPAN 320) Prose fiction of Spain and/or Spanish America. Topics may focus on an author, a period, a movement, a country or region, or a theme. Content may vary and the course may, therefore, be repeated for credit with consent of Department Chair.

CLASSICAL LANGUAGES

GREEK

GRK 111-112 Staff
(CF)Elementary Greek 6 credits
An intensive course in the fundamentals of Classical Greek grammar.

GRK 113-114 Staff
New Testament Greek 6 credits
A systematic introduction to the fundamentals of the grammar of Koine Greek as it is found in the New Testament.

GRK 205 Dr. Petrovic
(D)Legacy of Greece and Rome 3 credits
Survey of the artistic and cultural treasures of classical Greece and Rome with a focus on their enduring legacy in our own civilization.

GRK 207 Dr. Wilson
Roots of Greek in English 3 credits
The relationship of both Greek and English to the other languages of the Indo-European family; the Greek elements that have come into English are presented: bases, prefixes, numerals, hybrids, etc. A study of the 20-25% English words which come from Greek, particularly in scientific fields.

GRK 211-212 Staff
Intermediate Greek 6 credits
(Prerequisites: GRK 111-112 or equivalent) Review of fundamentals. Readings from Zenophon, Euripides, and the New Testament.

GRK 213 Dr. Wilson
(CL, D,W)Classical Greek Literature and Mythology 3 credits

This course examines the role that mythology played in Greek literature, and examines the changing attitudes of the Greeks towards the Olympian gods from Homer to the fourth century B.C. All readings and lectures in English.

GRK 220 Dr. Wilson
Ancient Civilization: Greece 3 credits

The political, constitutional, and cultural history of Greece from the earliest times to the death of Alexander the Great. All readings and lectures in English.

GRK 295 Dr. Petrovic
(D)Classic and Contemporary Greek Culture 3 credits

This travel course (9 days during the Spring/Easter Break) is a study of the historic cultural treasures of classical Greece and a visual and empirical examination of its remains in present Greece with a special focus on the enduring Greek legacy in our own Western civilization. The students will be acquainted, as well, with contemporary Greece, its people, its economy, its social dynamics, and its role in today's Europe. When we are in Greece, we will visit Athens, the Acropolis, the National Archeological Museum, Corinth, Mycenae, Epidaurus, Olympia, Delphi, three Greek islands, and many other contemporary Greek cultural landmarks. Lecture, discussion, reading, and examinations in English. In addition to travel, students will attend twenty regularly scheduled classes before and after the trip during the spring semester. (No prerequisite)

GRK 311-312 Staff
Readings in Greek Literature 3-6 credits

(Prerequisites: GRK 211-212 or equivalent) Selections from Greek writers to suit the students' special interests.

GRK 482-483 Staff
Guided Independent Study Variable credit

(Prerequisites: GRK 211-212 or equivalent) A tutorial program open to Junior and Senior students only. Content determined by mentor.

LATIN

LAT 111-112 Staff
(CF)Elementary Latin 6 credits

An intensive course in the fundamentals of Latin. Reading and composition.

LAT 205 Staff
History of Latin Literature 3 credits

A survey of Roman and post-Roman Latin literature. The course is taught in English. No Latin prerequisite.

LAT 207 Dr. Wilson
Roots of Latin in English 3 credits

The relationship of both Latin and English to the other languages of the Indo-European family; the Latin elements that have come into English are presented: bases, prefixes, numerals, hybrids, etc. Approximately 60-65% of English words come from Latin.

LAT 211-212 Staff
(CF)Intermediate Latin 6 credits

(Prerequisites: LAT 111-112 or equivalent) Review of fundamentals. Reading of selections from Caesar, Cicero and Virgil.

LAT 213 Dr. Wilson
(CL, D, W)Classical Roman Literature and Mythology 3 credits

The course examines the role that mythology played in Roman literature, and examines the changing attitudes of the Romans toward the divinities, manifested in literature from Plautus to Apuleius. All readings and lectures in English.

LAT 220 Staff
Ancient Civilization: Rome 3 credits

The political, constitutional, and cultural history of Rome from the earliest times to the end of the Western empire. All readings and lectures in English.

LAT 311-312 Dr. Wilson
Readings in Latin Literature 3-6 credits
(Prerequisites: LAT 211-212 or equivalent) Selections from Latin writers to suit the students' special interests. Topics will vary from year to year; the course may, therefore, be repeated for credit.

LAT 482-483 Staff
Guided Variable credit
Independent Study
(Prerequisites: LAT 211-212) A tutorial program open to Junior and Senior students only. Content determined by mentor.

LITERATURE

LIT 105 Staff
(CL, D)Introduction to 3 credits
World Literature in Translation
This course introduces students to significant works in English translation of world literature, while introducing the genres of narrative (fiction and non-fiction), poetry, and drama, and the critical terminology needed to discuss them. Taught in English. Readings may vary.

LIT 205 Staff
(CL, D, W)Modern 3 credits
Latin-American Literature
in Translation
A survey in English of twentieth-century Latin American writers, including Gabriel Garcia Marquez (Colombia), Jorge Luis Borges (Argentina), Rigoberta Menchu (Guatemala), Carlos Fuentes (Mexico), Joaquim Maria Machado de Assis (Brazil) and Isabel Allende (Chile). Introduction to major literary movements, such as the "Boom" and "magical realism," which have influenced writers in the U.S., Europe, and elsewhere.

LIT 206 Dr. Ledford-Miller
Travelers and Their Travels 3 credits
An examination of the history and literature of travel as expressed in a variety of both fictional and non-fictional accounts.

LIT 207 Dr. Ledford-Miller
(CL, D, W)Literature of 3 credits
American Minorities
Examination of racial and ethnic groups from the settlement of America until the present. Examination of the historical context and current situation of Native Americans, African-Americans, Hispanic Americans, Asian Americans, Women-as-minority, and other marginalized groups. Readings from literature and other disciplines. Cross-listed with Women's Studies Concentration.

LIT 208 Dr. Petrovic
(CL, D)French Masterpieces 3 credits
in English Translation
The study of selected major works from the leading French writers of the nineteenth and twentieth century who have made an important contribution to the development of Western civilization. Such authors as Stendhal, Flaubert, Gide, Proust, Camus and Malraux will be discussed.

LIT 209 Dr. Petrovic
(CL, D)Masterworks of Russian 3 credits
and Slavic Literature
A survey of major literary achievements of Slavic peoples. Dostoyevsky, Tolstoy, Cosic, Sienkiewicz and Solzhenitsyn will be read. No knowledge of Slavic languages is required. All readings and lectures are in English.

LIT 384 Dr. Ledford-Miller
(CL, D)Special Topics in 3 credits
American Minority Literature
This course examines a particular minority group in American society through texts written by and about that group. Representative groups include, for example, Native Americans, African Americans, Asian Americans, Hispanic Americans, and Women. This course may be repeated for credit when content varies.

HISTORY

DR. MICHAEL DeMICHELE, Chairperson

The department aims: 1. To train the student in solid historical methodology; 2. To present history as the study of interdependent human activities and concrete events which have social significance; 3. To engender an intelligent and critically sympathetic understanding of various civilizations and cultures.

Outstanding students are eligible for consideration in the Combined Baccalaureate/Master's Degree program (please refer to the section on The Graduate School and to the Graduate School Catalog for specifics of the program). Through careful utilization of intersession and summer sessions, it is possible to complete both the B.A. and M.A. degrees within a four-year period. Contact the chair or the graduate-program director of the department for additional information.

See the Pre-Law section in the catalog for details of the department's success in this area.

MINOR. A minor in History (18 credits) should include HIST 110-111 or HIST 120-121 or HIST 125-126 plus any four additional history courses.

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR		
MAJOR	HIST 110-111	United States History	3	3
MAJOR	HIST 120-121	Europe: 1500 to Present	3	3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE QUAN	QUAN ELECT	Quantitative Reasoning		3
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	3	3
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			16	**16**
		SECOND YEAR		
MAJOR	HIST 140 [2]	Research Methods	3	
MAJOR	HIST ELECT	Electives	3	6
COGNATE	ELECT [1]	Electives	3	3
GE S/BH	S/BH ELECT	Social/Behavioral Electives	3	3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
		THIRD YEAR		
MAJOR	HIST ELECT	Electives	6	3
COGNATE	ELECT [1]	Electives	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT	Free Electives	3	3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
			18	**18**
		FOURTH YEAR		
MAJOR	HIST 490 or 491 [3]	Seminar Elective	3	3
COGNATE	ELECT [1]	Electives	6	6
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT	Free Electives	3	3
			15	**15**
				Total: 130 CREDITS

[1] Students may use cognate electives to develop a second major.

[2] Department requires HIST 140, The Craft of the Historian, for history majors; students admitted to 4-year BA/MA program are recommended to take HIST 500, Research Methods. No student should take both Research Methods courses.

[3] Senior History majors are required to take HIST 490 or HIST 491.

INTERNATIONAL STUDIES

A major in International Studies seeks to provide the student with a full recognition and understanding of the multitudinous forces which shape the contemporary world – nationalism, wars, political and economic ideologies, cultural differentials, and modern technology. Such a broad knowledge and understanding of world affairs can be utilized in careers in teaching, international business, the legal profession, journalism, the Foreign Service of the United States and other government agencies.

MINOR. A minor in International Studies (18 credits) should include HIST 110 and 111 or PS 130 and 131 plus four additional courses from the following: PS 212, PS 213, PS 217, PS 218, PS 219, PS 221, PS 222, PS 295, PS 318, PS 319, PS 328, PS 330, PS 331, PS 332, PS 338; HIST 125, HIST 126, HIST 211, HIST 213, HIST 214, HIST 215, HIST 219, HIST 220, HIST 226, HIST 295, HIST 335, HIST 338, HIST 339, and GEOG 217.

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR	HIST 110-111	United States History	3	3
COGNATE	PS 130-131	American National Government	3	3
COGNATE	LANG 101-102 or 211-212	Elementary or Intermediate	3	3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE QUAN	QUAN ELECT	Quantitative-Reasoning Elective		3
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			16	**16**
		SECOND YEAR		
MAJOR	HIST 120-121	Europe: 1500 to Present	3	3
MAJOR	PS 212-ELECT	Internat'l Rel.-Elective	3	3
MAJOR	GEOG 134	World Regional Geography		3
COGNATE	LANG	Intermediate or Advanced	3	3
GE PHIL-T/RS	PHIL 120-T/RS 121	Intro. to Philosophy-Theology I	3	3
GE ELECT	ELECT	Free Elective	3	
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
		THIRD YEAR		
MAJOR	HIST or POL SCI[1]	Electives	3	3
GE S/BH	ECO 153-154	Prin. of Micro-Macro Econ.	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT	Free Electives	3	3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
			18	**18**
		FOURTH YEAR		
MAJOR	I.S. 390 ELECT	Seminar-Elective	3	3
MAJOR	HIST or PS[1]	Electives	3	3
COGNATE	ELECT	Electives	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT	Free Elective		3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosohy or T/RS Elective	3	
			15	**15**
				Total: 130 CREDITS

[1]Major electives to be selected from PS 213, PS 217, PS 218, PS 219, PS 221, PS 222, PS 295, PS 318, PS 319, PS 328, PS 330, PS 331, PS 332, PS 338; HIST 125, HIST 126, HIST 211, HIST 213, HIST 214, HIST 215, HIST 219, HIST 220, HIST 226, HIST 295, HIST 335, HIST 338, and HIST 339; GEOG 217, HIST 140, Research Methods, recommended.

HIST 110-111 Staff
(CH)History of the United States 6 credits
The United States from the time of its European beginnings to the present with special emphasis on the history of Pennsylvania; colonial origins to Reconstruction; Gilded Age to the modern era.

HIST 120-121 Staff
(CH)Europe, 1500 to the Present 6 credits
European history with concentration upon the political aspects of European development. The rise of national monarchies; political, social, economic and intellectual developments; industrialism, the new nationalism and liberalism.

HIST 125-126 Dr. Penyak
(CH, D) Latin America History 6 credits
Pre-Colombian America; the Spanish and Portuguese Colonial area, developments to the early nineteenth century. The Latin American Republics, Castroism, The Alliance for Progress, with special stress on inter-American problems.

HIST 140 Staff
(W)The Craft of the Historian 3 credits
Introduction to the craft of the historian including the techniques of historical study, research and writing as well as historiography. Students will be given various exercises dealing with both primary and secondary sources to enable them to think historically through writing exercises based on historical questions.

HIST 210 Dr. Homer
History as Biography 3 credits
An exploration of the nature of biography and its relationship to the study of the past. Biographies of several major figures from the modern era will be read and studied to exemplify different biographical techniques and their utility as means of historical inquiry.

HIST 211 Dr. Domenico
The Third World: Empire to Independence 3 credits
A study of the developing nations with the developed nations in the contemporary world.

HIST 212 Dr. DeMichele
(D)Rebels, Rogues, and Reformers 3 credits
A sociological cross-cultural, and psychohistorical approach to those folk heroes, political "expropriators" and bandits whose spectacular exploits have been romanticized and preserved through the centuries. Figures such as Robin Hood, Cartouche, Pancho Villa, Jesse James, Che Guevara and others will be considered.

HIST 213 Dr. Penyak
(CH, D) Gender and Family In Latin America 3 credits
(Prerequisite: HIST 125 or 126) Examines the role of gender and family in Latin America from 1521 to present. Themes of gender roles, marriage, family and licit and illicit sexuality will be highlighted. Individual units will examine machismo, marianism, relations of power and women in the workplace. Distinctions will be made according to race and class.

HIST 214 Dr. DeMichele
(CH, D)History of Contemporary World Politics 3 credits
Deals directly with the history of the political, economic, and social issues that are current in international affairs including the future possibilities of world order and the crises of foreign-policy-making.

HIST 215 Dr. Penyak
(CH, D) Church and Society In Latin America 3 credits
(Prerequisite: HIST 125 or 126) Examines the historic role of the Catholic Church in Latin America. Major themes include the conversion of New World peoples to Catholicism, syncretism, Church and State, and Liberation Theology. Other units include indigenous religions and beliefs, Protestantism and Judaism in Latin America.

HIST 216 Dr. Kennedy
(CH, D)Race in American History 3 credits
The course studies the role of race in American history from the colonial era to the present, focusing on the experience of African-Americans with consideration given to other racial and ethnic groups. Topics include: slavery; "Jim Crow" laws; the Ku Klux Klan; black migration of the

twentieth century; African-American community life; and the civil rights struggle.

HIST 217 Dr. Hueston
(CH)History of American Catholicism 3 credits
A survey of the significant events, trends, and individuals reflecting the Catholic experience in America from the earliest colonial settlements to the post-Vatican era.

HIST 218 Dr. Homer
The World at War, 1939-45 3 credits
Examination of the tactics, strategy, and global significance of World War II. The logistics and scope of the conflict. Importance of propaganda, patriotism and the people. Film-seminar approach. Film fee.

HIST 219 Dr. DeMichele
(CH, D)Modern World History 3 credits
A study of change and development in the world during the twentieth century. Emphasis on cultural, economic, and political differences between Western and non-Western states.

HIST 220 Dr. Homer
(CH) War and Modern Society 3 credits
(Formerly H/PS 215) Role of military force in international relations; historical background focusing on wars, American and European, of nineteenth and twentieth century; theories of function of war; arms control and deterrence of war.

HIST 221 Dr. Conover
(CH, D)The American West 3 credits
A study of acquisition, settlement, and development of the Trans-Mississippi West, including the mining, cattleman's and farmer's frontiers; Indian removal, and Manifest Destiny in Texas and Oregon.

HIST 222 Dr. Champagne
History of American Presidential Elections 3 credits
A study of the candidates, issues and campaigns in American Presidential elections from Washington to Kennedy. The course will also examine the evolution of the electoral process and the relationship between political parties.

HIST 223 Staff
Introduction to Irish History 3 credits
An introduction to Irish History which surveys the principal political, social, economic and intellectual changes in Irish life since the time of the pre-Celtic peoples. Topics will include: Celtic civilization; the coming of Christianity; the Norman invasion; the English connection; Irish nationalism; and the "troubles" in Northern Ireland.

HIST 224 Dr. DeMichele
(CH, D)Ethnic & Racial Minorities in Northeastern Pennsylvania 3 credits
Film-seminar approach to the study of various ethnic groupings in Northeastern Pennsylvania. Seeks to achieve better understanding of the immigrant's problems and accomplishments through use of documentary and feature films.

HIST 225 Staff
Imperial Russia 3 credits
From the crystallization of political forms in the ninth century through the Kievan State, Mongolian Invasion, rise of Muscovy to the Eurasian Empire from the seventeenth to the end of the nineteenth century.

HIST 226 Staff
Russian Revolution and Aftermath 3 credits
A study of the development of radical thought in nineteenth and twentieth century Russia. Analysis of various factors and forces at work in revolutionary Russia. Lenin, War, Communism, NEP, Stalin.

HIST 227 Dr. Shaffern
(D) The Civilization of Islam 3 credits
An introduction to the history of Islamic civilization from the career of the Prophet Muhammed (c. 62AD) to the eve of European colonization and imperialism.

HIST 228-229 Dr. Shaffern
Ancient History 6 credits
A survey of ancient civilizations of the Near East and Mediterranean worlds. The culture, society and science of Mesopotamia and Persia; Egypt – the Gift of the Nile; the ancient Israelites; heroic, archaic, classical and Hellenistic Greece; republican and imperial Rome; the origins of Christianity.

HIST 230-231 Dr. Shaffern
Medieval History 6 credits
The civilization of medieval Christendom from the fall of the Roman Empire to the beginning of the fourteenth century; its religious, social, economic, cultural and political aspects; the relationship between church and society, belief and life style, ideal and reality; the interaction between Western Christendom, Byzantium and Islam.

HIST 232 Dr. DeMichele
(CH)England, 1485 to 1714 3 credits
The end of the Wars of the Roses; Tudor Absolutism, Henry VIII and Reformation; Elizabeth I; Renaissance and Elizabethan music and literature; the Stuarts; Colonialism; Commonwealth; Restoration; the Revolution of 1688; Reign of Anne.

HIST 233 Dr. DeMichele
(CH)England, 1714 to Present 3 credits
Parliamentary rule; Cabinet government; political parties; Industrial Revolution; nineteenth-century reforms; building of a British Empire; World War I; problems of readjustment; World War II; Britain and the world today.

HIST 236 Dr. Homer
Modern Germany: 3 credits
Unification and Empire
The 1815 Confederation; 1848 and the failure of liberalism; the Age of Bismarck; Wilhelm II and the "New Course"; World War I and the Collapse of the Empire.

HIST 237 Dr. Homer
Modern Germany: 3 credits
The Twentieth Century
The troubled birth of the Weimar Republic: the Ruhr Crisis; the Stresemann Era; economic collapse and the rise of Nazism; the Third Reich, and World War II; the two Germanies and the "economic miracle."

HIST 238 Dr. Poulson
(CH, D)History of American 3 credits
Women: From Colonization to Mid-nineteenth Century
A study of American women from the colonial era to the mid-nineteenth century. Changes in the family, the work force, women's participation in politics and reform movements, and Native-American and African-American women.

HIST 239 Dr. Poulson
(CH, D)History of American 3 credits
Women: From Mid-nineteenth Century to the Present
A study of American women since the mid-nineteenth century. The effects of industrialization on the family, women's participation in the workforce, the Depression and the family, women and war, the feminist movement, and the conservative response.

HIST 240 Dr. Domenico
(D)Modern Italy 3 credits
This course will examine major developments in Italian history from the Napoleonic invasion until current crises of the Republic. Important themes for discussion will be the unification movement, the liberal state, Fascism and anti-Fascist resistance, the postwar Republic, cultural and social change, and economic development.

HIST 241 Dr. Shaffern
Law in the Western Tradition 3 credits
A survey of ideas about law in Western civilization from antiquity until the Civil War. Emphasis on the legal systems, such as the Hebrew, the Athenian, the Roman, the German, and the Catholic, that influenced the modern ideas about the law.

HIST 295 Dr. DeMichele
(CH)Britain: Past and Present 3 credits
(Prerequisite: any 100 level History course) Combines with travel experience in Great Britain to introduce the student to the major historical, cultural, political, economic and social events in Britain's past and present.

HIST 296 Dr. Domenico
(D)Italian History and Heritage 3 credits
Combines with a travel experience to introduce the student to Italy's cultural heritage and the history of the current Italian Republic. Students will visit sites of historic, artistic and religious significance as well as important places of the contemporary Italian republic.

HIST 310 Dr. Champagne
Colonial America, 1607-1763 3 credits
The European background of the Age of Discovery; the founding of the British-American colonies; their political, economic and cultural development; British colonial policy and administration; the development of an American civilization.

HIST 311 Dr. Champagne
American Revolution, 1763-1789 3 credits
Background to the War for Independence; British imperial policy; the development of economic and ideological conflicts; the military contest; British ministerial policy and the parliamentary opposition; the Confederation; the formation of the Constitution.

HIST 312 Dr. Champagne
The Early National Period of American History, 1789-1824 3 credits
Beginning of the New Government; politics and diplomacy in the Federalist Era; Jeffersonian Democracy; the War of 1812; nationalism and sectionalism, Marshall and the rise of the Supreme Court.

HIST 313 Dr. Champagne
The Age of Andrew Jackson, 1824-1850 3 credits
Politics and society in the Jacksonian Era, slavery and the antislavery crusade, American expansion in the 1840's; the Mexican War; the emergence of the slavery issue.

HIST 314 Fr. Masterson
Civil War & Reconstruction 3 credits
Crisis Decade, disintegration of national bonds; The War: resources, leadership, strategy, politics, monetary policy, diplomacy; Reconstruction: realistic alternatives, presidential and congressional phases, effects in the North and South.

HIST 315 Dr. Kennedy
(W)American Progressivism, War, and Reaction, 1900-1929 3 credits
(Prerequisites: HIST 110 and 111) American society from the age of Theodore Roosevelt and Woodrow Wilson to the "New Era" of the Roaring Twenties. Topics include Progressive reform movements, World War I and cultural conflict in the 1920's.

HIST 316 Dr. Poulson
(CH)From Depression to Cold War: 1929-1960 3 credits
A study of American society from the Great Depression to the election of 1960. The course will focus on the New Deal; American entry into World War II; the origins of the Cold War; and America in the age of "consensus."

HIST 317 Dr. Hueston
History of United States Immigration 3 credits
(Prerequisites: HIST 110-111) A study of immigration to the United States with emphasis on the period from the Revolution to the restrictive legislation of the twentieth century. Motives and characteristics of immigration. Experiences of newcomers.

HIST 318 Dr. Hueston
A History of American Assimilation 3 credits
(Prerequisites: HIST 110-111) The history of assimilation (or adjustment) of immigrants to American life. Nativism from pre-Civil War days to the 1920's. The "Old Immigration" and the "New Immigration" considered in the social, political, economic, and religious contexts of their eras. Special problems of the second generation from the 1850's to the 1960's.

HIST 319-320 Dr. Shaffern
Byzantine Civilization 6 credits
The Byzantine Empire from its origins in the fourth century to its collapse in the 15th; the political and economic growth of the Empire with emphasis on its art and religion.

HIST 321-322 Dr. Hueston
(CH) American Ideas and Culture 6 credits
(Prerequisites: HIST 110 for HIST 321, and 111 for HIST 322) History of American art, architecture, literature and thought; Colonial developments; the American enlightenment; the emergence of a national culture; Romanticism, post-Civil War realism in American art and literature; the intellectual response to the industrial order; the American mind in the 1920's; the intellectual and cultural response to the Depression; post-World War II developments.

HIST 323 Dr. Shaffern
The Renaissance 3 credits
A study of culture in Italy from the fourteenth to the sixteenth centuries. Humanism, art, historiography and politics will be emphasized.

HIST 324 Dr. Shaffern
The Reformation 3 credits
The history of Europe during the era of religious revivalism (sixteenth century). The course will focus on the magisterial Protestant reformers, the Catholic Counter-Reformation and dynastic politics.

HIST 325 Staff
French Revolution to 1815 3 credits
(Prerequisite: HIST 120) Historical antecedents; the philosophies; republicanism and the fall of the monarchy; Reign of Terror; the Directory; Napoleon; internal achievements; significance of the Spanish and Russian campaigns; and War of Liberation.

HIST 326 Dr. Homer
Europe in the Age of Absolutism 3 credits
(Recommended for Background: HIST 120) A study of the major political, social, economic and intellectual movements in Europe from the rise of royal absolutism until the outbreak of the French Revolution.

HIST 327 Dr. Penyak
(CH,D) The African Experience in Latin America 1500-1900 3 credits
(Prerequisite: HIST 125 or 126) Examines the experiences of Africans in the colonies and former colonies of Latin America and the Caribbean with emphasis on Spanish America and Portuguese Brazil. Units will highlight slavery, the response of slaves to subjugation; the role of free Africans and men and women of color, intermarriage, religion and music.

HIST 330 Dr. Domenico
Europe, 1815-1914 3 credits
(Prerequisite: HIST 121) A study of nineteenth-century Europe concentrating on The Congress of Vienna and its aftermath, the Age of Nationalism and Realism, European Dynamism and the non-European world, and the Age of Modernity and Anxiety.

HIST 331 Dr. Poulson
(C)Recent U.S. History: 1960 to the Present 3 credits
A study of American society since 1960. The course will focus on the New Frontier and Great Society; the Vietnam War; protest movements; Watergate; and the conservative response to these developments.

HIST 332 Dr. Kennedy
(W)America in the Gilded Age, 1865-1900 3 credits
(Prerequisites: HIST 110-111) American society in the age of industrialization and urbanization. Topics include the emergence of big business and labor conflict, immigration and the growth of cities, Populism, imperialism, and the Spanish-American War.

HIST 333-334 Dr. Domenico
Twentieth-Century Europe 6 credits
World War I; Treaty of Versailles; Russia becomes the USSR; the European struggle for security; Italian Fascism; rise of Nazi Germany; Asia between the two wars; World War II; loss of colonial empires in Africa and Asia; development of the Cold War; Marshall Plan and NATO.

HIST 335 Staff
World War II, Cold War and Detente 3 credits
The diplomacy of World War II; the development of the Cold War between the U.S. and the U.S.S.R. and the adoption of the policy of detente.

HIST 336 Atty. Rosenberg
History of American Law 3 credits
(Prerequisites: HIST 110-HIST 111) Traces the history of ideas and concepts utilized by the courts, legislature, organized bar and administrative agencies to solve legal problems: and shows how American legal thought and reasoning developed from Colonial days to the present.

HIST 337 Dr. DeMichele
English Constitutional and Legal History 3 credits
Anglo-Saxon basis; Norman political institutions; Magna Carta; beginnings of common law; jury system; Tudor absolutism; struggle for sovereignty; rise of House of Commons; democratic reforms; extension of administrative law.

HIST 338-339 Dr. Hueston
American Diplomatic History 6 credits
(Prerequisites: HIST 110-111) A study of American diplomatic history and principles; The Revolution; Early American policies on isolation and expansion; The War of 1812; The Monroe Doctrine; Manifest Destiny; The Civil War; American imperialism and the Spanish-American War; Latin American diplomacy in the twentieth century; World War I; Attempts to preclude further war; World War II; Cold War; Contemporary problems.

HIST 340 Dr. Kennedy
(W)History of Urban America 3 credits
(Prerequisites: HIST 110-111) The evolution of cities in the United States from the founding of colonial settlements to the end of the twentieth century. The nature of cities and urban life, the process and impact of urban growth, and the problems facing contemporary cities will all be considered.

HIST 390 Staff
History Internship 3-6 credits
A practical work experience which exposes the student to the nature of historical investigation, analysis, and/or writing in a museum, historical site, or public agency. Supervision by faculty and agencies.

HIST 490 Staff
(W) Seminar in European History 3 credits
(Restricted to Senior History majors and 4-year BA/MA History students) An analysis of selected topics in European history from the fifteenth to the twentieth century. Extensive readings. Historical research and writing stressed.

HIST 491 Staff
(W) Seminar in American History 3 credits
(Restricted to Senior History majors and 4-year BA/MA History students) An analysis of selected topics in U.S. or Latin American history from the Colonial era to the present. Extensive readings. Historical research and writing stressed.

GEOG 134 Dr. Conover
(S)World Regional Geography 3 credits
Introduces the major concepts and skills of geography. A regional approach stresses the five themes of geography including location, place, human environment interaction, movement and region.

GEOG 217 Dr. Conover
(D, S) Cultural Geography 3 credits
Study of the influence of geography on the origin, structure, and spread of culture. Focuses on describing and analyzing the ways language, religion, economy, government and other cultural phenomena vary or remain consistent from place to place.

IS 390 Staff
(W) Seminar in International Studies 3 credits
Required for International Studies majors. Other advanced undergraduates may take this course with permission of the professor. This course may be used for either History or Political Science credit.

MATHEMATICS

DR. JAKUB S. JASINSKI, Chairperson

The mathematics program balances algebra vs. analysis in its basic courses and pure vs. applied mathematics (including probability and statistics) in its advanced courses. Supporting courses balance traditional physics with contemporary computer science. Graduates have great flexibility: some continue study in mathematics or related fields, some teach, some become actuaries and some work in jobs which vary from programming to management. A student chapter of the Mathematical Association of America encourages early professionalism.

MINOR. Mathematics minor must include MATH 114, 221, 222, and 351 and two additional electives chosen from Mathematics courses numbered over 300 or PHYS 350.

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR		
MAJOR (GE QUAN)	MATH 142-114	Discrete Structures-Analysis I	4	4
COGNATE	CMPS 134	Computer Science I	3	
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE PHIL-T/RS	PHIL 120-T/RS 121	Intro. to Philosophy-Theology I	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED	Physical Education		1
			17	**17**
		SECOND YEAR		
MAJOR	MATH 221-222	Analysis II-Analysis III	4	4
MAJOR	MATH 351	Linear Algebra		3
COGNATE (GE NSCI)	PHYS 140-141	Elements of Physics I-II	4	4
GE S/BH	S/BH ELECT	Social/Behavioral Electives	3	3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
COGNATE	ELECT[2]	Elective	3	
			17	**17**
		THIRD YEAR		
MAJOR	MATH 446-Elective	Real Analysis I-Elective	3	3
MAJOR	MATH 448-Elective	Modern Algebra I-Elective	3	3
COGNATE	ELECT [2]	Electives	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT	Free Elective	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
		FOURTH YEAR		
MAJOR	MATH ELECT [1]	Electives	3	3
MAJOR	MATH ELECT [1]	Electives	3	3
MAJOR	MATH ELECT [1]	Electives	3	
COGNATE	ELECT [2]	Electives	3	3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
GE ELECT	ELECT	Free Electives	3	3
			15	**15**

Total: 130 CREDITS

[1] Electives for Mathematics majors: Major electives are selected from Mathematics courses numbered above MATH 300; also PHYS 350, PHYS 351, CMPS 362 or CMPS 364. A student must select as an elective at least one of MATH 447 or 449, and at least two of MATH 312, 345, 460, 461. Additional courses numbered under MATH 300 may be taken as free electives but not as major electives.

[2] Cognate electives must be used to complete a minor, a concentration, a second major, secondary-education certification, or a package of courses pre-approved by the department.

The results of the placement tests administered during freshman orientation assist students and their advisors in choosing the proper beginning-level mathematics sequence and the proper entry-level within that sequence. If a course is a prerequisite for a second course, directly or indirectly, and a student receives credit for the second course then that student will not be allowed to register for the prerequisite course.

BIOMATHEMATICS

The Biomathematics major leads to employment or graduate study ranging from biostatistics through public health to medicine. The major contains four tracks: Epidemiology, Molecular Biology, Physiology, or Population Biology. Students interested in medical school should alter the standard schedule so that General Biochemistry can be elected in the third year. This may be done by attending summer sessions, by using AP credits, or—when approved by an academic advisor—by shifting General & Analytical Chemistry to the first year and Organic Chemistry to the second year.

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR	MATH 142-114	Discrete Structures-Analysis I	4	4
MAJOR	BIOL 141-142	General Biology I-II	4½	4½
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy	3	
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Phys. Ed.	1	½
			15½	**15**
		SECOND YEAR		
MAJOR	MATH 221-222	Analysis II-Analysis III	4	4
MAJOR	BIO ELECT[1]-379[2]	Track Electives-Biostatistics	4½-5	3
COGNATE	CHEM 112-113	General & Analytical Chemistry	4½	4½
GE PHIL-T/RS	T/RS 121-122	Theology I-II	3	3
GE PHIL-T/RS	PHIL 210	Ethics		3
GE PHED	PHED ELECT	Physical Education	1	½
			17-17½	**18**
		THIRD YEAR		
MAJOR	MATH 312-351	Probability-Linear Algebra	3	3
COGNATE	CHEM 232-233	Organic Chemistry I-II	4½	4½
COGNATE	PHYS 140-141	Elements of Physics I-II	4	4
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT	Electives	3	3
GE PHED	PHED ELECTIVES	Physical Education	½	½
			18	**18**
		FOURTH YEAR		
MAJOR	BIOL ELECT [1]	Track Elective	3-5	3-5
MAJOR	MATH ELECT[3]	Mathematics Elective		3-4
GE HUMN	HUMN ELECT	Humanities Elective	3	3
GE S/BH	S/BH ELECT	Social/Behavioral Electives	3	3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
GE ELECT	ELECTIVE	Elective	3	3
			15-17	**15-18**

Total: 131½ - 136½ CREDITS

[1]Biology electives must all come from one track. Epidemiology Track: BIOL 260 or 371, BIOL 250, BIOL 344. Molecular Biology Track: BIOL 260, BIOL 361-362. Physiology Track: BIOL 245, two of BIOL 345, 347, 348, 349, 445, or 446. Population Biology Track: three of BIOL 370, 371, 375, or 472.

[2]MATH 314 may be substituted for BIOL 379 but only after MATH 312 has been completed.

[3]MATH 320 or 341: Both courses employ computer technology.

MATH 005 Staff

Algebra 3 credits

A study of algebra including factoring, exponents, radicals, graphing, and linear and quadratic equations. Enrollment is restricted to Dexter Hanley College students who are limited in algebra skills. Permission of the dean of The Dexter Hanley College is required in order to enroll in this course. Credits count only as free elective.

MATH 101 Staff

(Q)Mathematics Discovery 3 credits

Topics exploring various aspects of mathematical reasoning and modeling are selected to bring the excitement of contemporary mathematical thinking to the nonspecialist. Examples of topics covered in the past include fractal geometry, chaos theory, number theory, and non-Euclidean geometry. Not open to students with credit for or enrolled in any mathematics course numbered above 101.

MATH 102 Staff
(Q)Fundamentals of Numerical Mathmatics 3 credits
A study of the fundamental elemantary concepts underlying numbers and number systems and their applicatioins. Topics covered include logic, sets, functions, the natural numbers, integers, rational numbers, real numbers, estimation, number theory, patterns, counting, and probability, in addition to other topics chosen by the instructor. Not open to students with credit for or enrolled in Math 103 or any mathematics course numbered above 105.

MATH 103 Staff
(Q)Pre-Calculus Mathematics 4 credits
An intensified course covering the topics of algebra, trigonometry, and analytic geometry. Not open to students with credit for or enrolled in MATH 109 or any calculus course.

MATH 105 Staff
(Q)Fundamentals of Geometric Mathemetics 4 credits
A study of the fundamental elementary concepts underlying geometric mathematics and its applications. Topics covered include logic, sets, functions and relations, classical geometry, measurement, transformations, statistics, and analytic geometry and its relationship to algebra and functions, in addition to other topics chosen by the instructor. Not open to students with credit for or enrolled in Math 103 or any other mathematics course numbered above 106.

MATH 106 Staff
(Q)Quantitative Methods I 3 credits
Topics from algebra including exponents, radicals, linear and quadratic equations, graphing, functions (including quadratic, exponential and logarithmic), and linear inequalities. Not open to students with credit for or enrolled in MATH 103 or MATH 109.

MATH 107 Staff
(Q)Quantitative Methods II 3 credits
(Prerequisite: MATH 106 or equivalent) Topics from differential calculus including limits, derivatives, curve sketching, marginal cost functions, and maximum-minimum problems. Integration. Not open to students with credit for or enrolled in MATH 114.

MATH 108 Staff
Quantitative Methods III 3 credits
(Prerequisite: MATH 107 or 114) Topics from integral calculus including the definite and indefinite integral, techniques of integration, and multivariable calculus. Not open to students with credit for or enrolled in MATH 221.

MATH 109 Staff
(Q)Quantitative Methods in the Behavioral Sciences 4 credits
The mathematics necessary for elementary statistics: algebraic rules, logic, equations, functions, and linear regression. Particular attention paid to lines, parabolas, reciprocals, square roots, logarithms, and exponentials. Intended for students from psychology and related disciplines. Not open to students with credit for or enrolled in MATH 103.

MATH 114 Staff
(Q)Analysis I 4 credits
(Prerequisite: MATH 103 or equivalent) The beginning of a twelve-credit sequence covering the topics of calculus and analytic geometry. Limits, derivatives, integration. Fundamental Theorem.

MATH 142 Staff
(Q)Discrete Structures 4 credits
A study of symbolic logic, sets, combinatorics, mathematical induction, recursion, graph theory, and trees. Intended for Mathematics, Computer Science, and Computer Information Systems majors, but open to other qualified students.

MATH 184-284-384-484 Staff
Special Topics 1-4 credits each
Topics, prerequisites, and amount of credit will be announced prior to preregistration.

MATH 201 Staff
(Q,W)Algebra and Environmental Issues 3 credits
(Prerequisites: WRTG 106 or 107). Study of college algebra applied to environmental issues such as the concentration of carbon dioxide in the atmosphere. Modeling will include the use of algebra to analyze data and to predict future situations. Students will use written English as a tool to understand algebraic computations, to present and interpret models based on scientific data. Recommended for non-science students, especially those in the Environmental Studies Concentration. This course is not open to students with credit for or enrolled in MATH 103, 106, 109, or any calculus course.

MATH 204 Staff
(Q)Special Topics of Statistics 3 credits
Study of the computational aspects of statistics; hypothesis testing, goodness of fit; nonparametric tests; linear and quadratic regression, correlation and analysis of variance. Not open to students who have credit for or are enrolled in an equivalent statistics course (e.g., PSYC 210, MATH 312 or MATH 314).

MATH 221 Staff
Analysis II 4 credits
(Prerequisite: MATH 114) Topics include: applications of the definite integral, transcendental functions, methods of integration, improper integral, parametric equations, polar coordinates, and indeterminate forms.

MATH 222 Staff
Analysis III 4 credits
(Prerequisite: MATH 221) Topics include: infinite series, vectors, solid analytic geometry, multivariable calculus, and multiple integration.

MATH 310 Staff
Applied Probability and Mathematical Statistics 4 credits
(Prerequisite: MATH 221) Basic concepts of probability theory, random variables, distribution functions, multivariable distributions, sampling theory, estimation, confidence intervals, hypothesis testing, linear models and analysis of variance.

MATH 312 Staff
Probability Theory 3 credits
(Prerequisite: MATH 221) Basic concepts of probability theory, random variables and their distribution functions; limit theorems and Markov chains.

MATH 314 Staff
Statistics 3 credits
(Prerequisite: MATH 312) Measure of central tendency, measure of dispersion, continuous random variables, expected value, moments, confidence intervals, hypothesis testing, regression, and correlation.

MATH 320 Staff
Chaos and Fractals 3 credits
(Prerequisite: One math course beyond MATH 221 and one CMPS course or equivalent experience) Study of chaotic dynamical systems and fractal geometry. Topics from discrete dynamical systems theory include iteration, orbits, graphical analysis, fixed and periodic points, bifurcations, symbolic dynamics, Sarkovskii's theorem, the Schwarzian derivative, and Newton's method. Topics from fractal geometry include fractal, Hausdorff, and topological dimension, L-systems, Julia and Mandelbrot sets, iterated function systems, the collage theorem, and strange attractors.

MATH 325 Staff
(W)History and Philosophy of Mathematics 3 credits
(Prerequisite: MATH 222, and either MATH 142 or a math course numbered above 300 or instructor's permission) A survey of major developments in mathematics from ancient through modern times. Students study the progression of mathematical creative thought from inception to rigorization then abstraction in order to develop an appreciation for the significance of these contributions and to gain a broader understanding of mathematics as a human endeavor. Topics may include the development of numeral systems, algebra, Euclidean and non-Euclidean geometry, calculus, number theory, real analysis, and the beginnings of logic and set theory.

MATH 330 Staff
Actuarial Mathematics 3 credits
(Prerequisite: MATH 221) Theory of interest, accumulation and discount, present value, future value, annuities, perpetuities, amortizations, sinking funds, and yield rates.

MATH 341 Staff
Differential Equations 4 credits
(Prerequisite: MATH 222) Treatment of ordinary differential equations with applications. Topics include: first-order equations, first-order systems, linear and nonlinear systems, numerical methods, and Laplace transforms. Computer-aided solutions will be used when appropriate.

MATH 345 Staff
Geometry 3 credits
Euclidean, non-Euclidean, and projective geometry. Transformations and invariants.

MATH 346 Staff
Number Theory 3 credits
(Prerequisite: MATH 114) Topics include divisibility, the Euclidean algorithm, linear diophantine equations, prime factorization, linear congruences, some special congruences, Wilson's theorem, theorems of Fermat and Euler, Euler phi function and other multiplicative functions, and the Mobius Inversion Formula.

MATH 351 Staff
Linear Algebra 3 credits
(Prerequisite: MATH 221) Vector spaces, matrices, determinants, linear transformations, eigenvalues, eigenvectors, inner products, and orthogonality.

MATH 360 Staff
Coding Theory 3 credits
(Prerequisite: MATH 351) A study of algebraic coding theory. Topics include: linear codes, encoding and decoding, hamming, perfect, BCH cyclic and MDS codes, and applications to information theory.

MATH 446 Staff
Real Analysis I 3 credits
(Prerequisite: MATH 222) Topics include: the algebra and topology of the real numbers, functions, sequences of numbers, limits, continuity, absolute and uniform continuity, and differentiation.

MATH 447 Staff
Real Analysis II 3 credits
(Prerequisite: MATH 446) Selections from: integration theory, infinite series, sequences and infinite series of functions, and related topics.

MATH 448 Staff
Modern Algebra I 3 credits
(Prerequisite: MATH 351) Fundamental properties of groups, rings, polynomials, and homomorphisms.

MATH 449 Staff
Modern Algebra II 3 credits
(Prerequisite: MATH 448) Further study of algebraic structures.

MATH 460 Staff
Topology 3 credits
(Prerequisite: MATH 446) Topological spaces: connectedness, compactness, separation axioms, and metric spaces.

MATH 461 Staff
Complex Variables 3 credits
(Prerequisite: MATH 222) The theory of complex variables: the calculus of functions of complex variables, transformations, conformal mappings, residues and poles.

MATH 462 Staff
Vector Calculus 3 credits
(Prerequisites: MATH 222, MATH 351) The calculus of scalar and vector fields and of functions defined on paths or surfaces. Implicit Function, Green's, Strokes, and Gauss' Theorems. Applications.

INTD 224 Dr. Dutko
(Q, W)Science, 3 credits
Decision-Making and Uncertainty
See description under interdisciplinary courses, p. 221.

MEDIA AND INFORMATION TECHNOLOGY

DR. DARLA GERMEROTH, Director

Electronic communication has significantly changed the world in many ways. Virtually all aspects of communication within and between institutions and corporations are affected by the need to provide information in multiple media. As the fields of computers and communication have come together, they have created the need for a new type of educational preparation. No longer do we look only to print documents and to oral presentations as the way to convey information. Rather, there is a great need for people who are knowledgeable in both the technical aspects and the communication aspects of this new paradigm.

Our program builds on the strengths of several departments at the University to produce a program that has strength in all its parts. Starting with Physics/Electrical Engineering to provide a careful look at the science of communication, we add the support of the Computing Sciences to provide programming tools and network expertise. To the student's understanding of the science and the languages of computers, we add the practical and theoretical skills of the Communication Department to produce effective multimedia specialists. The student may add additional writing courses from the English Department. In addition to courses in the major, the student will develop a content area in another discipline and will be required to produce a major project in this area. This culminating project will demonstrate practical experience as well as theoretical knowledge.

MIT 310
E-Research: Information-Seeking Skills And Strategies 3 credits

This course concentrates on the use of the Internet for research in a variety of fields, emphasizing online research techniques and effective online search strategies, both of which will be valuable for careers in an e-world. Topics include the organization of information; evaluation and selection of databases; evaluation of information from web resources; types of online information resources (e.g. government documents, statistical sources; consumer, medical, and business information; online communities, etc.); online periodical databases; the use of search engines; copyright and fair use issues; and citing electronic sources. Students will develop life-long learning skills for locating and evaluating informatin. Hands-on experience will be emphasized.

MIT 481
Internship in Information Technology 3 credits

This is an extensive job experience in media and information technology that carries academic credit. Prior approval is required.

MIT 490
Information Technology Project 3 credits

(Seniors only, Departmental permission required). In this course, students prepare and present Information Technology projects to be evaluated by the instructor and their fellow students.

MAJOR ELECTIVES *(See department pages for course descriptions)*

CMPS 312	Web Technology (or CMPS 202)
CMPS 376	Rapid Prototyping
COMM 310	Mass Communication Law
COMM 324	Advanced Newswriting
MIT 310	E-RESEARCH: Information-Seeking Skills and Strategies
MIT 481	Internship in Information Technology
PHYS 103	Seeing the Light
PHYS 108	New York Times Physics
PHYS 113	Science of Photography
WRTG 211	Technical & Business Writing
WRTG 218	Writing the Web

MEDIA AND INFORMATION TECHNOLOGY

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
MAJOR	CMPS 134-136[1]	Computer Sci I – Computer Prog II	3	3
MAJOR	PHYS 104[2]	Intro. to Consumer Technology		3
COGNATE	ELECT	Elective		3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computer & Info Literacy	3	
GE PHIL-T/RS	PHIL 120-T/RS 121	Intro Phil-Theology I	3	3
GE HUM	HUMN ELECT	Humanities Elective	3	
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			16	**16**
		SECOND YEAR		
MAJOR	COMM 329	Graphics		3
COGNATE	ELECT	Electives	3	3
GE QUANT	MATH 204[3]	Special Topics of Statistics	3	
GE HUMN	ELECT	Humanities Electives	3	3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics–Theology II	3	3
GE S/BH	S/BH ELECT	Social/Behavioral Electives	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
		THIRD YEAR		
MAJOR	COMM 317-COMM 318	Digital AV – Multi-Media Pres.	3	3
MAJOR	PHYS 204-CMPS 311	Information Tech-Networks	3	3
MAJOR	ELECT	Elective	3	
COGNATE	ELECT	Electives	3	6
MAJOR	ELECT	Electives	3	3
GE HUM	ELECT	Humanities Elective	3	
GE NCSI	NCSI ELECT	Natural Science Elective		3
			18	**18**
		FOURTH YEAR		
MAJOR	MIT 490	Information Technology Project	3	
MAJOR	PHIL-T/RS	Phil 214 or equivalent		3
MAJOR	ELECT	Elective	3	
COGNATE	ELECT	Electives	3	6
GE ELECT	ELECT	Electives	6	6
			15	**15**
			Total: 130 CREDITS	

To most effectively use the skills developed in the M.I.T. major, a content area is needed. Therefore each student will complete either:

(a) another academic major; or

(b) an academic minor (or concentration) and take a course in Statistics[3] (Quantitive Reasoning Area).

[1] Or CMPS 144

[2] Also GE NSCI requirement

[3] MATH 204 or any other statistics course that fits into GE QUANT. If the cognate is a second major in the sciences, any GE QUANT is acceptable.

[4] PHIL 214 Computers and Ethics or equivalent course in Philosophy-Theology/Religious Studies area.

MILITARY SCIENCE

LTC. GREGORY HOCH

Army Reserve Officer Training Corps (ROTC)

The objective of the Military Science program is to develop leadership skills. The Military Science program at the University of Scranton was selected as the "Best Unit" for 1999 in the First ROTC Region that encompasses the entire eastern third of the United States. The department established itself in the top 10% of all 270 ROTC Programs in 1998.

ROTC is a flexible program that can be tailored to most students needs, especially those in their freshman and sophomore years. Military Science instruction for University of Scranton students is offered on-campus, through the Military Science Department. Two-year and four-year programs are offered, both of which lead to a commission as an officer in the United States Army. To obtain this commission, qualified male and female students must pass a physical examination and complete either the two-or four-year program of approved Military Science courses. Most students take one course per semester of the basic course program (freshman and sophomore years), and one course per semester of the advance courses (junior and senior years). All contracted students in the advanced courses (junior and senior years) will receive a $200 per month subsistence allowance. Many of the students win Army ROTC scholarships. The University of Scranton's Military Science Department has enjoyed outstanding results in awarding 2- and 3-year scholarships. All the students who applied for 2- and 3-year scholarships for 1998 and 1999 were offered scholarships. Uniforms, equipment, and textbooks required for Army ROTC classes will be supplied by the Military Science Department.

Students (juniors/seniors/graduate students) qualify for entry into the Advance ROTC course in three ways:

1. On-Campus Courses: Most students take the introductory military-science courses of the basic military-science program on-campus during their freshman and sophomore years. This allows them to participate in adventure training, and to learn about the opportunities and responsibilities of being an Army officer without incurring any obligation.
2. Summer Programs: Students may also qualify through a paid, five-week, no-obligation summer training session held in Fort Knox, Kentucky, which provides intensive military training equivalent to the instruction received by freshmen and sophomores in the basic course program.
3. Advanced Placement: Students with any prior military service, members of the United States Army Reserves or National Guard, or former Junior ROTC members may qualify for advanced placement into the advanced Army ROTC program.

TWO-YEAR PROGRAM: Available to qualified full-time students (generally having a minimum of two academic years remaining to degree completion) who meet the criteria set forth in paragraphs (2) or (3) above. Application for this program should be made prior to the end of the spring semester of the sophomore year for those students not previously enrolled in Military Science instruction. Also available for graduate students.

FOUR-YEAR PROGRAM: Consists of attending the freshman and sophomore courses; students can begin as late as the fall semester of their sophomore year if approved by the department chairman. Enrollment in the first four courses of Military Science is accomplished in the same manner as any other college course and carries no military obligation for non-scholarship students. Application to enroll in the Advanced Military Science

courses should be made while the student is enrolled in Military Science 202.

Each student is required to complete a paid, five-week Advanced Training Camp at Fort Lewis, near Seattle, Washington. Normally this is done after completing Military Science 302 in the student's junior year. Transportation, food, lodging, and medical and dental care are provided in addition to base pay.

SCHOLARSHIPS: There are significant scholarship opportunities for ROTC students. Scholarships pay up to $17,000 for tuition, $600 for books, and $2,500 for spending money that increases $500 per year up to $4,000 for Seniors. Freshmen and sophomores can apply for two- and three-year full scholarships in December. Historically, most University of Scranton students win scholarships by their junior year.

Winners of full, high-school level, ROTC scholarships are provided free room and board by The University of Scranton.

PARTNER IN NURSING EDUCATION (PNE): In 1996, the Army designated the University of Scranton as a PNE and sends five high-school-level ARMY ROTC Nursing Scholarship recipients to Scranton annually. Additionally, Nursing students who complete the Army Nurse Summer Training Program (NSTP) receive three credits on their transcripts toward NURS 482 lab.

TRANSCRIPT CREDIT: Up to 15 Military Science credits can be counted on the transcript. Additionally, Physical Fitness Training (PHED 138) can count for the three required Physical Education credits and nurses receive three credits toward senior-year clinicals for Army NSTP.

MINOR IN LEADERSHIP

Leadership is the ability to get things done through others. American Military Leadership emphasizes total competence in one's field, coupled with an absolute respect for ethics. It is based on the knowledge of people, history, and current management practices. The Military Science Department offers a minor in Leadership that capitalizes on the classroom instruction offered in the courses listed below provided by several University departments. The minor also offers unique field experiences for students to practice leadership skills in demanding but safe and controlled training activities. The minor is open to all University students in the advanced military science courses.

A minor in Leadership requires 18 credits, at least six of which must be approved electives outside of the Military Science department. The student must take MS 301, MS 302, MS 401, and MS 402, plus courses from the list of approved electives. They must also complete a University internship approved by the instructor of record, the Professor of Military Science. The student may choose two electives from the following approved courses:

CJ 237	HIST 220	MGT 471	PHED 138	PS 327
GEOG 134	HIST 223	MGT 490	PS 130,131	PS 329
HIST 214	HIST 239	MS 101, 102	PS 213	PSYC 220
HIST 216	INTD 103	MS 201, 202	PS 227	PSYC 236
HIST 218	MGT 351	MS 480	PS 231	PSYC 284*
HIST 219	MGT 352	MS 481	PS 232	S/CJ 234

The student must receive a grade of "C" or better in each course in order for it to count towards the minor, and the student must have an average of 3.0 in the courses counting toward the minor.

*Special Topics: Behavior Modification

MS 101-102 Staff
Concepts of 2 credits
Leadership I & II
Instruction is designed to provide a very basic understanding of military knowledge while concentrating on the leadership skills and civic responsibilities important to all citizens. Students may elect to participate in many activities that produce expertise in rappelling, orienteering, first aid, swimming and marksmanship.

MS 111-112 Staff
Leadership Applications 0 credits
Laboratory
Freshmen and sophomores are encouraged to participate in this elective. "Hands-on" instruction is designed to reinforce classroom training on weapons, first aid, tactics, leadership and military drill.

MS 131-132 Staff
Advanced Leadership 0 credits
Applications Laboratory
Advanced-course junior/senior students are required to attend. Hands-on reinforcement of classroom leadership training and military instruction is conducted. Students plan, resource and conduct the training under the supervision of regular army sergeants and officers. Juniors are tested in situations similar to those they will experience at their advanced summer camp.

MS 201-202 Staff
Dynamics of 4 credits
Leadership I & II
Instruction is designed to familiarize the student with basic military operations and the principles of leadership. Students experience hands-on training with navigation and topographic equipment, first aid and military weapons.

MS 301-302 Staff
Military Leadership I & II 3 credits
(Prerequisites: MS 201-202 or equivalent) Instruction is designed to continue the development of leadership qualities and technical skills required in the military. Students teach freshmen and sophomores to use equipment and are graded in positions of responsibility. Students learn to plan, resource and execute effective training. The goal of the junior year is to prepare students to excel at the advanced summer camp prior to their senior year. (2 credits are awarded for MS 301, 1 credit for MS 302.)

MS 401-402 Staff
Advanced Military 3 credits
Leadership
Instruction is designed to prepare students to function as members of a military staff and concurrently continues leadership development. The Professor of Military Science teaches this course and mentors students prior to their first military assignment. The course covers briefing techniques, effective writing, army training systems, and the logistical and administrative support of military operations. (2 credits are awarded for MS 401, 1 credit for MS 402.)

MS 480 Staff
Internship in 2 credits
Military Science
Advanced Leadership Camp
(Prerequisites: MS 301, MS 302, contracted status as a cadet) The Internship is a five-week experience of training and evaluation conducted at Fort Lewis, Washington. It gives the student the opportunity to practice the leadership theory acquired in the classroom. Each student executes at least seven major leadership missions and receives critique and mentoring continuously. ROTC cadets from all across the country participate. Students will spend at least 400 hours in the field. There is no cost to the student.

MS 481 Staff
Internship in Military Science Cadet Troop Leading 1 credit
(Prerequisites: MS 301, MS 302, contracted status as a cadet) The Internship is a three-week experience of leadership training and mentoring as an understudy to a military officer in a US Army troop unit. It gives the student the opportunity to lead real soldiers responsible for a military mission. The intern will actually supervise the planning and execution of the unit's scheduled training. The intern receives continuous assessment and mentoring. Students spend at least 200 hours in the field. There is no cost to the student.

PHED 138 Staff
Physical Fitness Training 1 credit
A modern up-to-date program of fitness and health training. The one-hour sessions are conducted before classes on Mondays, Wednesdays, and Fridays. The routine consists of stretching and warm-ups, followed by strengthening exercises, and concluding with an aerobic workout. There is a wide variety of activities including running, aerobics, swimming, gymnastic sports, weight lifting and the "Army Daily Dozen." Safety is a prime concern and all sessions are supervised by senior military sergeants and officers. This course is designed (but not required) to be counted toward the three-credit PHED requirement during the junior and senior years. This course may be audited and is open to all students.

NOTE: Candidates for an Army commission through Military Science are required by regulation to complete academic courses in the areas of communications skills, military history, and computer literacy. Generally, these requirements will be met by satisfying the University's general-education requirements. Contact the professor of Military Science for specific requirements.

NEUROSCIENCE

DR. TIMOTHY CANNON, Director

The foundation courses of this interdisciplinary curriculum are selected from the Biology, Psychology, and Chemistry departments. Depending upon the electives chosen, the program can prepare students for a variety of graduate programs within the field of neuroscience. Such graduate training may draw from a range of disciplines, including biology, psychology, anatomy, pharmacology, toxicology, biophysics, biochemistry and medicine. Students have ample research opportunities in laboratories that can support a diversity of behavioral, biochemical, neurophysiological and neuroanatomical investigations. The program is administered by an interdisciplinary committee.

	Dept. & Number	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR (GE NSCI)	BIOL 141-142	Gen. Biology I-II	4½	4½
COGNATE	CHEM 112-113	Gen. Analytical Chem. I-II	4½	4½
MAJOR (GE S/BH)	PSYC 110	Fundamentals of Psychology	3	
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE FSEM	INTD 100	Freshman Seminar	1	
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE T/RS	T/RS 121	Theology I		3
			16	**18**
		SECOND YEAR		
MAJOR	BIOL 348	Neurophysiology		3
MAJOR	ELECT	Major Elective		3
MAJOR	PSYC 231	Behavioral Neuroscience	4½	
MAJOR	PSYC 210-330[1]	Psych. Statistics-Research Methods in the Behavioral Sciences	3	5
COGNATE (GE QUAN)	MATH 114	Analysis I	4	
GE PHIL-T/RS	PHIL 120-T/RS 122	Intro. to Phil.-Theology II	3	3
GE HUMN	ELECT	Humanities Elective	3	
GE PHED	PHED ELECT	Physical Education	1	2
			18½	**16**
		THIRD YEAR		
MAJOR	MAJOR ELECT	Major Electives	6-8	3-4
COGNATE	ELECT	Cognate Electives	6-8	6-8
GE PHIL	PHIL 210	Ethics	3	
GE HUMN	HUMN ELECT	Humanities Elective		3
GE S/BH	S/BH ELECT	Social/Behavioral Elective		3
			15-19	**15-18**
		FOURTH YEAR		
MAJOR	MAJOR ELECT	Major Elective	3-4	
COGNATE	ELECT	Cognate Electives	6-8	
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
GE ELECT	ELECT	Free Electives	3	12
			15-18	**18**
			Total: 131½-141½ CREDITS	

[1] PSYC 330 fulfills one of the writing-intensive requirements of the general-education program.

MAJOR: Total credits 42½-46½. Majors must take two electives from both Biology and Psychology. Psychology electives must be drawn from PSYC 220, PSYC 221, PSYC 222, PSYC 225, PSYC 230, PSYC 234, PSYC 235, or, with permission of the director, PSYC 284, or 384. Biology electives must be drawn from those intended for Biology majors. With permission of the director, Special Topics in Neuroscience (NEUR 384) may be used to fulfill one Psychology or Biology elective requirement.
COGNATE: Total credits 31-37. Students should consider their projected graduate program when choosing cognate electives from the areas of chemistry, mathematics, physics, and computer science.

NEUR 384
Special Topics in Neuroscience
(Formerly NEUR 170; Prerequisites: BIOL 141-142, PSYC 231) Course topics are developed by individual faculty to provide in-depth coverage of specific areas in neuroscience. Some courses have required or elective laboratory components. Course titles and descriptions will be provided in advance of registration.

NEUR 493-494 **Staff**
Undergraduate Research in Neuroscience 3-6 credits
(Formerly NEUR 160-161; Prerequisites: BIOL 141-142, PSYC 231, PSYC 330, and permission of instructor) Individual study and research on a specific topic relevant to neuroscience under the supervision of a faculty member. It is strongly recommended that this research be initiated during the junior year, and it is expected that the research will extend over a two-semester period.

PHILOSOPHY

DR. WILLIAM V. ROWE, Chairperson

The basic objectives of the Philosophy Department may be stated as follows:

1. To inspire the student to confront the philosophical problems implicit in the experience of self, others and the universe, together with the question of their relations to ultimate transcendence (God and immortality);

2. To develop in the student habits of clear, critical thinking within the framework of both an adequate philosophical methodology and accepted norms of scholarship;

3. To introduce the student to reading critically the great philosophers, past and present; and

4. Finally, to help the student to formulate for himself or herself a philosophy of life or world-view consistent with the objectives of liberal education at a Catholic university.

For the Bachelor of Arts degree in Philosophy, the major must take 24 credits (eight courses) in Philosophy in addition to the six credits required of all students. These 24 credits must include a logic course and at least two courses on the 300 or 400 level. Majors should take logic before the senior year.

See also the Philosophy offerings in the SJLA Program described elsewhere in this catalogue.

MINOR. A minor in philosophy consists of 18 credits--the six credits required of all students and 12 additional credits. Seven distinct philosophy minors are available: the traditional open minor, a minor in Ethical Issues of Professional Life, a minor in Philosophy and Commercial Life, a Pre-Law minor in philosophy, a minor in the History of Philosophy, a minor in Philosophy and Religious Life, and a minor in Philosophy and Science. Course listings for specific minors are available on the Philosophy Department web page or in the Philosophy Department office.

PHIL 120, Introduction to Philosophy, is a prerequisite for PHIL 210, Ethics.
PHIL 210 is a prerequisite for all other philosophy courses.

PHIL 120 Staff
Introduction to Philosophy 3 credits
The aim of this course is to awaken in the student an appreciation of the nature and method of philosophical inquiry through an examination of key texts that grapple with central questions in the history of philosophy.

PHIL 210 Staff
Ethics 3 credits
(Prerequisite: PHIL 120) A critical examination of fundamental moral issues through close readings of seminal texts spanning the history of philosophy from ancient Greece to the present. The ethical theories of such philosophers as Plato, Aristotle, Augustine, Aquinas, Kant and Mill may be examined as major representatives of the Western philosophical tradition. Themes to be explored may include happiness, virtue, the nature of justice, free choice, conscience, natural law and obligation, God and morality.

PHIL 211 Dr. Black
(P)Business Ethics 3 credits
This course is an application of standard philosophical principles and theories to the critical study of questions, issues, and problems that surround the moral conduct of business. Recommended for business majors.

PHIL 212 Fr. Mohr
(P)Medical Ethics 3 credits
(Prerequisite: PHIL 210) The course will introduce the student to the presence of basic ethical concerns in the practice and distribution of health care. The course will emphasize both current scholarship and the practical nature of the subject through the discussion of medical cases, ethical theories, and current readings. Recommended for those interested in the health care professions.

PHILOSOPHY

	Dept. and No.	Descrptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
MAJOR (GE PHIL)	PHIL 120-210	Introduction to Philosophy-Ethics	3	3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE QUAN	QUAN ELECT	Elective	3	
GE NSCI-S/BH	NSCI ELECT-S/BH ELECT	Nat. Sci. Elective - Soc/Beh. Elective	3	3
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1	1
			16	**16**
		SECOND YEAR		
MAJOR (GE PHIL)	PHIL 200 or 300 level	Second-year Electives	3	3
GE PHIL-T/RS	T/RS 121-122	Theology I & II	3	3
GE HUMN	FOREIGN LANGUAGE[1]	Humanities Electives	3	3
GE S/BH-NSCI	S/BH ELECT-NSCI ELECT	Soc/Beh. Elective - Nat. Sci. Elective	3	3
GE ELECT	ELECT	Natural Science	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
		THIRD YEAR		
MAJOR	PHIL 200 or 300 level	Third-year Electives	3	6
COGNATE	ELECT[2]	Electives	9	9
GE ELECT	ELECT	Electives	3	3
			15	**18**
		FOURTH YEAR		
MAJOR	PHIL 300 or 400 level	Fourth-year Electives	6	3
COGNATE	ELECT[2]	Electives	9	9
GE ELECT	ELECT	Electives	3	3
			18	**15**
				Total: 130 CREDITS

[1] Foreign language is recommended by department.

[2] In the Cognate area of 24 hours, the department requires that 12 credits be focused in one field. It should be noted that six credits not required by the department in the major area are added to the free area in senior year. These may be taken in any field including Philosophy.

PHIL 213 Dr. Casey
(P)Environmental Ethics 3 credits
(Prerequisite: PHIL 210) An introduction to environmental philosophy and the various ethical responses to the ecological crisis of the late twentieth century. Examines such issues as biocentrism vs. anthropocentrism, the relation between culture and nature, the environmental ethical debate.

PHIL 214 Dr. Nordberg
(P)Computers and Ethics 3 credits
(Prerequisite: PHIL 210) The computer revolution raises new ethical problems and presents novel aspects of traditional ethical issues. Ethical aspects of hacking, software piracy, computer-aided decision-making, protection of software by copyright, patent, trade-secret laws, unauthorized use of computer resources, privacy and data-base security, program warranties and programmer responsibility, artificial intelligence, the interface between human and computer.

PHIL 215 Staff
(P)Logic 3 credits
An introduction to logic as the science of argument including the nature of arguments in ordinary language, deduction and induction, truth and validity, definition, informal fallacies, categorical propositions and syllogisms, disjunctive and hypothetical syllogisms, enthymemes, and dilemmas.

PHIL 218 Dr. Meagher
(P, D) Feminism: 3 credits
Theory and Practice
In this course we will explore the relationship between feminist analyses of sexism and political practices aimed at eliminating it. To this end we will examine divergent political traditions and show ways in which feminists have criticized, appropriated, and made use of them in their own work. Special attention will be paid to the interrelationship of gender, class and race. This course may be counted toward the Women's Studies Concentration.

PHIL 219 Staff
Russian Philosophy 3 credits
This course will trace the evolution of Russian philosophical thought. The offering will concentrate on select nineteenth-and twentieth-century authors and will also highlight several grand themes dear to Russian philosophers, including integral knowledge, the philosophy of history, Godmanhood and Sophia. Consideration will be afforded both religious and non-religious thinkers.

PHIL 220 Dr. Baillie
(P)Ancient Philosophy 3 credits
The Pre-Socratics, Plato, Aristotle and their immediate successors. Special emphasis on the theory of knowledge, the metaphysics and philosophical anthropology of Plato and Aristotle.

PHIL 221 Dr. Pang-White
(P)Medieval Philosophy 3 credits
A survey of philosophy in the European Middle Ages, including the connections between medieval philosophy and its classical and Christian sources; questions concerning nature/grace, reason/faith, theology/philosophy, and the nature and ethos of scholasticism.

PHIL 222 Dr. Nordberg
(P)Modern Philosophy I 3 credits
Renaissance background: Petrarch and the humanist movement; Galileo and the beginnings of modern science; Descartes: mathesis universalis; the difficulties of the Cartesian method; solution in the one substance of Spinoza; British Empiricism: Locke and the problem of substance, Berkeley's '*Esse est percipi*,' culmination in Hume and the doctrine of perceptual atomism.

PHIL 223 Fr. Mohr
(P)Modern Philosophy II 3 credits
The development of idealism in the thought of Kant, Fichte, Schelling, and Hegel, with its influence on Feuerbach, Marx, Engels, and Kierkegaard. Special consideration of dialectical thinking in its resolution of the antitheses of reality and appearance, freedom and necessity, infinite and finite, and faith and knowledge.

PHIL 224 Dr. Fairbanks
(P)Foundations of 3 credits
Twentieth-Century Philosophy
A study of some of the key figures that have set the tone for the twentieth-century philosophy. Buber, Marx, Kierkegaard, Hume and Russell are studied in detail.

PHIL 225 Dr. Pang-White
(P, D)Asian Philosophy 3 credits
This course will introduce students to the various systems of Asian philosophy including Hinduism, Buddhism, Confucianism, Taoism and Shinto with special emphasis on the metaphysics, ethics and politcal philosophy of these systems.

PHIL 226 Drs. Pang-White, Black
(P, D)Chinese Philosophy 3 credits
An introduction to the classical and modern Chinese understanding. The course will focus on the Daoist's teachings and vision, the modifications made to Daoism by Buddhism, and the thought of Confucius and the Neo-Confucians. Included in the course will be comparisons and contrasts with Western thought and some discussion of Japanese Buddhism. The topics of the course will include ethics, social life, mysticism, religion and reality.

PHIL 227 Dr. Klonoski
(P)Political Philosophy 3 credits
Philosophical and ethical analysis of the social nature of man with emphasis on modern social questions. Ethics of the family, of nation and of communities. International ethics.

PHIL 229 Fr. Mohr, Dr. Rowe
(P, D)Philosophy of Religion 3 credits
An investigation of the main topics which have emerged in philosophers' reflections on religion: arguments for the existence of God; the possibility of statements about God; assessment of religious experience; the notions of miracle, revelation, immortality and afterlife; the problem of evil; relations between religious faith and reason; religion and ethics. Selected reading from classical and contemporary authors.

PHIL 231 Staff
(P) Philosophy of Women 3 credits
This course reviews the philosophies of woman in western thought from Plato and Aristotle to Nietzche, Schopenhauer, and Beauvoir. It concludes with an interdisciplinary selection of readings, to be addressed philosophically, on women in art, anthropology, literature, politics, theology, psychology, etc.

PHIL 232 Staff
Idea of a University 3 credits
An investigation of the philosophy of a liberal education, using John Henry Newman's *Idea of a University* as a tool.

PHIL 234 Fr. Mohr
(P)Existentialism 3 credits
A critical study of selected works of Kierkegaard, Jaspers, Marcel, and Sartre, with special emphasis on the existentialist themes of selfhood, freedom, dread, responsibility, temporality, body, limited and unlimited knowledge and reality, and fidelity to community.

PHIL 235 Dr. Fairbanks
(P)New Directions in Philosophy 3 credits
The purpose of this course is to focus on very recent works of philosphical value that open new avenues of intellectual reflection. Books and video tapes are updated regularly.

PHIL 236 Dr. McGinley
(P)Freud and Philosophy 3 credits
Examination of overt and covert philosophical implications of Freud's system of psychoanalysis. Emphasis on actual writings of Freud, particularly after 1920.

PHIL 237 Dr. Fairbanks
(P)The Philosophy of Multiculturalism 3 credits
The purpose of this course is to focus on important philosophical ideas that are diverse, cross-cultural and global in their content and application. Specifically, the course summarizes and discusses basic philosophical articles and selected video tapes that complement traditional western concepts. Secondly, students are encouraged to develop their own critical reactions concerning these global philosophical issues.

PHIL 238 Dr. Klonoski
(P)Wealth and the Human Good 3 credits
What is wealth? Is wealth the key to happiness? Is it possible for individual human beings and human society to flourish without wealth? What are the true purposes of wealth? Is the acquisition of wealth natural to human beings and are there any boundaries for such acquisition? What does it mean to say that the measure of success in contemporary consumer society is wealth? These and other questions related to life in modern capitalist, commercial society will be addressed in the course. Selected readings from the history of philosophy, literature, anthropology and sociology will be studied. Authors range from Plato to Baudrillard.

PHIL 240 Dr. Pang-White
(P, W) Logic and Written Discourse 3 credits
The goal of PHIL 240 is to equip students with an understanding of our reasoning process and the conditions that constitute good reasoning as employed in ordinary discourse, and also the skill to construct good arguments in writing. For this purpose, this course will cover the following four major topics: (1) The nature of logical arguments, (2) Deduction (e.g., syllogistical reasoning, propositional logic), (3) Induction (e.g., analogical reasoning, causal inference), and (4) Fallacies (formal vs. informal fallacies).

ED/P 306 Dr. Klonoski
(P)Philosophy of Education 3 credits
An examination of representative modern systemic philosophies of education with a critical analysis of the answers that each system of philosophy provides to the important questions concerning the nature of knowledge, value, man and society.

PHIL 310 Dr. Casey
(P) Epistemology 3 credits
An introduction to the theory of knowledge and its related concerns. This will involve close readings of historical texts from ancient to contemporary philosophy that are considered representative of the dominant epistemological theories in the Western tradition. Topics include sensation, perception, memory, recollection, reason, language and the body. The unifying theme of the course will be the historical importance of imagination and the role it plays in knowing.

PHIL 311 Drs. Baillie, McGinley
(P)Metaphysics 3 credits
A textual inquiry into the adequacy of philosophers' answer to the fundamental question, "What is?" Special attention will be given to Plato, Aristotle, Aquinas, Kant's critical philosophy and the issues of nature and history.

PHIL 312 Dr. Rowe
(P)Modern Philosophy III 3 credits
This course is a study of four figures in nineteenth century philosophy: Hegel, Kierkegaard, Marx and Nietzsche. We will consider such issues as the relation between philosophy and non-philosophical experience, the place of philosophy in society, the theme of conflict in life and thought, and the simultaneous spread and decay of humanism in the nineteenth century.

PHIL 313 Dr. Klonoski
(P)Philosophy and Friendship 3 credits
An historical survey of primary texts which discuss friendship. Readings in the course include authors of the ancient, medieval, modern and contemporary periods in the history of philosophy. Some of these authors are, Xenophon, Plato, Aristotle, Cicero, Augustine, de Montaigne, Bacon, Kant, Emerson, Nietzsche, Gray, Arendt and Sartre.

PHIL 314 Dr. Meagher
(P, D,W) Philosophy and the City 3 credits
This course allows students to explore philosophical issues connected to urban and public policy as a way of developing a deeper understanding of their own relation to the city and their roles as citizens. The course will analyze the city as a site of tension between community and difference, as a space of public citizenship, and as built environment that reflects human connection to art and nature.

PHIL 315 Dr. Baillie
(P)Twentieth-Century Political Philosophy 3 credits
This course is a survey of modern social contract theory and its relation to capitalism, and of modern Marxism. Issues raised will include obligation and consent, equality, freedom and self-determination, the role of markets, and the role of the state.

PHIL 316 Dr. Baillie, Fr. McKinney
(P, D, W)American Perspectives on Health Care Ethics 3 credits
This course will introduce the student to basic ethical issues in the practice and distribution of health care in the United States. Topics covered will include the physician-patient relationship, clinical issues such as transplants or end-of-life concerns, the nature of professionalism, just distribution, ethics in health-care institutions, and biomedical research. The course will emphasize both current scholarship and the practical nature of the subject through the discussion of medical ethical cases, theories, and current writings. Recommended for those interested in the health-care professions.

PHIL 319 Fr. McKinney
(P)Philosophy of Law 3 credits
A study of the various justifications of law and their implications. Special consideration will be given to the problems of civil disobedience and the force of law in private institutions.

PHIL 320 Dr. Black
(P)Aesthetics 3 credits
The main theories of the essential character of beauty or art, how they are judged, how they are related to the mind and the whole person, how they are created and how this creativity expresses a commitment to oneself and to the world.

PHIL 321 Dr. Nordberg
Great Books 3 credits
Major thinkers in the Western philosophical, religious, political and literary traditions. This course emphasizes philosophical themes in literature.

PHIL 325 Dr. Meagher
(P)Literature and Ethics 3 credits
This course examines that "old quarrel between philosophy and literature," the dispute between Plato and Ancient Athenian poets regarding the source of morality, and studies how this quarrel continues in contemporary moral discourse. The aims of this course are to: 1. gain a better understanding of issues in contemporary moral thinking, especially regarding so-called "narrative approaches to ethics"; and 2. rethink the "old quarrel," as we examine contemporary philosophers' turns to literature in an attempt to reconstruct the concept of moral agency.

PHIL 326 Dr. Meagher
(P, D)Advanced Topics in Feminist Philosophy 3 credits
(Prerequisite: PHIL 218, other women's studies courses, or permission of the

instructor) This course will explore a special topic in feminist philosophy. The topic will vary according to student and faculty interest. Possible topics might include: feminism and aesthetics, issues of equality, philosophy of women. Course might be repeated as topics vary. This course may be counted toward the Women's Studies Concentration.

PHIL 327 Dr. McGinley
Readings in the Later Plato 3 credits

A survey and contextualization of the dialogues usually said to be "Later" in Plato's intellectual development will precede a textually based examination of those dialogues in which Plato's dialectic turns on the "concept" of difference. Thaetetus, Sophist, and Parmenides will be emphasized.

PHIL 328 Dr. Meagher
(P)Philosophy of Literature 3 credits

This course examines the nature of literature, and its relation to philosophy and political life. Students will study both classical texts on literature and contemporary Anglo-American examinations and appropriations of them, as well as recent European literary theory.

PHIL 330 Staff
(P)Fate, Destiny & Dignity 3 credits

This course will use historical and contemporary philosophical texts to begin a discussion of human nature in terms of: 1) absolute origin--creature of God vs. evolutionary accident; 2) ultimate destiny--is death the end of human life? 3) may we still talk about the soul? 4) persons--public & private, accompanied and alone. Throughout the course, students will be seeking to position themselves to answer the question, "What must be true of human nature for friendship and love to be possible?

PHIL 331 Dr. Casey
(P)Feminist Philosophy of Science 3 credits

A feminist critique of both the alleged value-free character of modern science and the positivist philosophy of science supporting this view. The course thus focuses on feminist arguments for the contextual, i.e., social, political and economic, nature of science and the resulting need to rethink such key concepts as objectivity, evidence and truth in light of androcentrism and gender bias. Consideration is also given to critical responses from feminist and nonfeminist defenders of more traditional accounts of science.

PHIL 340 Dr. Rowe
(P, D)Philosophy and Judaism 3 credits

In a setting that witnessed both the destruction of European Jewery and the end of Jewish Diaspora through the creation of the State of Israel, Jewish philosophers wrote and spoke with a distinct, yet universal voice. This course is a survey of Jewish philosophical writing in this context, with a focus upon the specific ways Judaism and philosophy may be related and were related in the 20th century. Under the heading of 'philosophy ***and*** Judaism, our study will disclose a philosophizing 'about' Judaism, a philosophizing 'from out of' Judaism, and a philosophizing 'for' Judaism.

PHIL 410 Dr. Black
(P)Philosophy of Culture 3 credits

Examines the meaning of the term "culture." Explores the notions of civilization and barbarism, common principles in cultural development, and the interaction of such cultural forces as myth, magic, language, art, religion, science, and technology. Special attention will be given to the question of "progress" and "regress" in culture.

PHIL 411 Dr. Pang-White
(P)Thomas Aquinas: Philosophy and Controversy 3 credits

A contextual survey of the philosophy of Thomas Aquinas, arguably the greatest thinker of the 13th century, the golden age of Scholasticism. Selection of topics from his metaphysics, ethics, and anthropology will be examined. Topics may include but are not limited to: Aquinas' distinction between existence and essence, his synthesis of Aristotelian philosophy, Avicennian metaphysics (an Arabian philosophy), and Christianity, his doctrine on faith and reason, his dispute with the Averroists on the status of the intellect, the condemnation of some of his propositions in 1277, and his later canonization in 1323.

PHIL 412 Dr. Casey
(P, D)Art and Metaphysics 3 credits
A rigorous exploration of 1) the end of metaphysics as it plays itself out in modern science and technology, and 2) the significance of art as a way of overcoming the nihilism inherent in this end. Contemporary works of imaginative literature as well as of philosophy will be read as means to reflect critically on the postmodern condition of nihilism. Special attention will be given to the thought of Martin Heidegger and Hannah Arendt.

PHIL 414 Dr. Rowe
(P, D, W)Philosophy of Emmanuel Levinas 3 credits
This course is a study of the twentieth-century Jewish philosopher, Emmanuel Levinas. We will focus on Levinas' theory of ethical experience, an account that takes its categories from both Greek and Hebrew sources, thereby enriching the dialogue between Jewish and Christian traditions in philosophy.

PHIL 415 Fr. McTeigue
(P)Philosophy of God 3 credits
This course will use classic and contemporary texts to begin a discussion of evil as a challenge to traditional notions of the existence, power, wisdom, and goodness of God. We shall also consider whether hope is an intellectually honest response to the problem of evil.

PHIL 418 Dr. Casey
(P)Phenomenology 3 credits
An introduction to phenomenology, which is a critical methodological approach to human experience. This twentieth-century European movement will be examined through selected works of Husserl, Heidegger, Sartre, and Merleau-Ponty. The intent of the course is to explore phenomenology both as a theoretical approach to the study of human consciousness and the lived-world and as a unique philosophical method.

PHIL 420 Dr. Black
(P)Philosophy of Rhetoric 3 credits
A systematic investigation of the form, meaning and influence of rhetoric. Explores the relationships between topic and metaphor, logic and narration, ethos and logos, conscience and persuasion. Special attention is given to the various relationships between rhetoric and philosophy.

PHIL 425 Fr. McKinney
Postmodern Philosophy 3 credits
An examination of the transition from modernist culture and thought to postmodernist culture and thought. Derrida's method of deconstruction will serve as the paradigm example of postmodernism. Recommended for those interested especially in literature and fine arts.

PHIL 430 Dr. Meagher
(P)Philosophy of the Social and Behavioral Sciences 3 credits
The goal of the course is to encourage students to think philosophically about issues raised in social scientific studies, especially regarding the following: 1) The problem of cross-cultural understanding and interpretation, 2) The difficulties of research-design and methodology, and 3) The relationship between social science, ethics, and policy making. Readings will be drawn from social scientific texts, "classic" debates in the philosophy of social science, and recent work in feminist epistemology and philosophy of the social sciences. Students interested in philosophy and/or the social sciences are encouraged to participate.

PHIL 431 Dr. Fairbanks
(P)Philosophy of Science 3 credits
An introduction to the history and philosophy of science. Selections from Darwin's *The Origins of Species* (1859) and *The Descent of Man* (1871) and Popper, Feyerabend, Hanson, Stace, Quine, Frank, Rescher, Hempel, and Baier.

PHIL 434 Dr. Baillie
(P)Issues in Philosophy and Theology 3 credits
This course will investigate certain modern and contemporary problems in the relationship between philosophy and theology. In particular, it will examine the ways in which philosophical discussions (both specific arguments and general positions) influence theological discussions, as evidence of the suggestion that philosophy "gives voice" to theology.

PHYSICS

DR. ROBERT SPALLETTA, Chairperson

The Department of Physics and Electrical Engineering offers majors in Physics and Biophysics, as well as the Electrical Engineering, Computer Engineering and Electronics-Business majors described earlier. The objectives of the department are to provide skills, understanding, and the methodology required to initiate active participation in the development of new knowledge about the material universe. The approach of the physicist, based as it is on the analysis of mathematical models dealing with matter and energy and their interactions, supplies a unique and important insight to the solution of problems in many disciplines.

A 1988 study by the Office of Institutional Research at Franklin and Marshall College shows that over the last 66 years, The University of Scranton ranked 33rd out of 977 four-year, private, primarily undergraduate institutions as the baccalaureate origin of physics doctorates. In addition, the Biophysics concentration in recent years has regularly produced students admitted to medical school.

PHYSICS

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR (GE NSCI)	PHYS 140-141	Elements of Physics I-II	4	4
COGNATE (GE QUAN)	MATH 103[1]-114 or MATH 114-221	Pre-Calculus Math-Analysis I or Analysis I-II	4	4
COGNATE	CMPS 134	Computer Science I		3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy		3
GE FSEM-PHED	INTD 100-PHED	Freshman Seminar-Physical Education	1	1
			15	**18**
		SECOND YEAR		
MAJOR	PHYS 270-352	Modern Physics-Statistical & Engineering Thermodynamics	4	3
COGNATE	ENGR 253-254	Intro. to CAD-3-D CAD	1	1
COGNATE	MATH 221-222 or MATH 222-341	Analysis II-III or Analysis III-Differential Equations	4	4
GE S/BH	S/BH ELECT	Social/Behavioral Electives	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE PHIL-T/RS	PHIL 210-T/RS 121	Ethics-Theology I	3	3
			18	**17**
		THIRD YEAR		
MAJOR	PHYS 447-448	Electromagnetics I-II	3	4
MAJOR	PHYS 371-372	Mechanics-Atomic & Laser Phys.	3	3
MAJOR	PHYS 350	Applied & Engineering Math		3
COGNATE/MAJOR	MATH 341/ELECT	Differential Equations or Elective	3-4	
GE PHIL-T/RS	T/RS 122	Theology II	3	
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16-17	**17**
		FOURTH YEAR		
MAJOR	PHYS/EE	Electives	3	3
MAJOR	PHYS 493	Physics Research	3	3
MAJOR	PHYS ELECT	Elective	3	3
COGNATE	ELECT	Elective	3	
GE ELECT	ELECT	Free Electives	3	3
GE ELECT	ELECT	Free Electives	3	3
			18	**15**

Total: 134-135 CREDITS

[1] Physics majors starting with MATH 103 due to placement test results take one fewer Physics elective.

BIOPHYSICS

The Biophysics major is designed to prepare a student to apply the physical and mathematical sciences to problems arising in the life sciences and medicine. By choosing proper electives, the student can prepare to enter graduate study of biophysics, biology, biochemistry, medicine or dentistry.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
MAJOR (GE NSCI)	PHYS 140-141	Elements of Physics	4	4
MAJOR	BIOL 141-142	General Biology	4½	4½
COGNATE (GE QUAN)	MATH 103-114 or MATH 114-221	Pre-Calculus Math/Analysis or Analysis I-II	4	4
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE FSEM	INTD 100	Freshman Seminar	1	
			16½	**18½**
		SECOND YEAR		
MAJOR	PHYS 270-352	Modern-Statistical Physics	4	3
MAJOR	CHEM 112-113	General Analytical Chemistry I-II	4½	4½
COGNATE	EE 241	Circuit Analysis		4
COGNATE	CMPS 134	Computer Science I	3	
COGNATE	MATH 221-222 or MATH 222-341	Analysis II-III or Analysis III-Diff. Equations	4	4
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy	3	
GE PHIL-T/RS	T/RS 121	Theology I		3
			18½	**18½**
		THIRD YEAR		
MAJOR	ELECT	Physics, Biology, or Chemestry	3	3
MAJOR	CHEM 232-233	Organic Chemistry I-II	4½	4½
GE T/RS	T/RS 122	Theology II	3	
GE PHIL	PHIL 210	Ethics	3	
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
GE S/BH	S/BH ELECT	Social/Behavioral Electives	3	3
GE HUMN	HUMN ELECT	Humanities Elective		3
GE PHED	PHED ELECT	Physical Education	1	1
			17½	**17½**
		FOURTH YEAR		
MAJOR	ELECT	Physics, Biology, or Chemestry	6	6
GE HUMN	HUMN ELECT	Humanities Electives	6	3
GE ELECT	ELECT	Free Electives	3	6
			15	**15**
			Total: 137 CREDITS	

MINOR. The minor in Physics includes PHYS 140, PHYS 141, PHYS 270 (all with labs), PHYS 352, ENGR 252, and at least one of PHYS 473, PHYS 372 and/or PHYS 371. Minimum credits required for minor: 21.

Phys 100-114 are courses designed for non-science majors. They require no background in science or math.

PHYS 100 Prof. Kalafut
(E)History of Science and Technology 3 credits

The evolution of scientific inquiry from the pre-Socratics to the present. Focus on the key concepts and fundamental laws of nature which enable humans to understand and control the forces of nature and develop modern technological societies and on the theme that science arises from traditions that are spiritual as well as technical. The spiritual element will be explored from the perspective of the life and tradition of the Catholic Church and the founding of universities in the Middle Ages.

PHYS 101 Dr. Varonides
(E)The Solar System 3 credits

The study of the solar system, its origin, its evolution, its fate. Study of the planets, asteroids, meteors and comets. Theories about the cosmos from antiquity to the modern age.

PHYS 102 Dr. Connolly, Staff
(E)Earth Science 3 credits
Selected topics from geology and meteorology, weather forecasting, ground and surface water, mountain building, volcanoes, earthquakes, plate tectonics, and oceanography.

PHYS 103 Dr. Fahey
(E)Seeing the Light 3 credits
The physics of light and vision. Includes topics such as biophysics of the human eye, the visual system, color vision, binocular vision, and the wave nature of light.

PHYS 104 Dr. Zakzewski
(E)Introduction to Consumer Technology 3 credits
Every day we listen to the radio or compact-disc recordings, watch TV, use photocopiers and fax machines without really knowing how they work. Designed to provide the scientific background to understand the operation of common communication systems and electronic equipment.

PHYS 105 Dr. Varonides
(E)Man and the Evolutionary Universe 3 credits
The study of the universe from the ancient times to the present. The ideas and approaches of various peoples are to be discussed, from the era of the powerful myths to the scientific approach of the Greeks, up to modern times, focusing on man and the evolving universe, in a historical and modern perspective. The role and the involvement of the Church in scientific thinking will be stressed as well.

PHYS 106 Prof. Kalafut
(E)Energy and the Environment 3 credits
Focus on various aspects of man's use of energy and changes in the environment that accompany that use. Sources of energy; the nature of the present energy and environmental crises and possible solutions; energy requirements of the future; conservation; and alternate energy sources.

PHYS 107 Dr. Spalletta
(E)"Hands-On" Physics 3 credits
An introduction to the scientific method with an emphasis on the physical reality around us. Students will participate in a series of experiments and discussions illustrating various physical phenomena in order to acquire the scientific background to participate in the assessment of important social, political, and scientific issues such as the environment, energy policy, the application of medical technology, and space exploration.

PHYS 108 Dr. Spalletta
(W, E)New York Times Physics 3 credits
Every day we are bombarded with information regarding the impact of technology on our lives. Using *The New York Times*, students will explore the scientific and technological concepts of our modern world. Topics will vary weekly.

PHYS 109 Dr. Varonides
(E)The Conscious Universe 3 credits
A course that discusses and concentrates on matters like *Waves, Quanta and Quantum Theory*. Science will be viewed as a rational enterprise committed to obtaining knowledge about the actual character of physical reality and the character of the physical law.

PHYS 110 Dr. Connolly
Meteorology 3 credits
Focus on the basic physical and chemical phenomena involved in the determination of climate and weather, enabling the student to comprehend weather events, patterns, and forecasting. Topics include: atmosphere composition and structure, moisture and precipitation, cloud formation, pressure and wind, cyclones, circulation of atmosphere, air masses and fronts, and forecasting.

PHYS 113 Dr. Connolly
(E)The Science of Light and Photography 3 credits
This introductory-level science course intended for non-science majors covers the basic science of light and its application in the technology of photography. It begins with an historical overview of early photographic methods and moves up to modern digital cameras. Presented, at an introductory level, are the scientific principles of light waves and rays, the optics of lenses, the process involved in the use of a camera for picture taking and the formation and development of the image. Topics include the nature of light,

laws of optics, cameras, development of black and white and color images. and the use of digital electronics for photographic capture and display. This course is not for major elective credit in Physics, Biophysics or EE.

PHYS 114 Dr. Varonides
Solar Electricity 3 credits
This course concentrates on how to obtain energy from the sun. It explains the history, physics and engineering of this renewable energy source, with special attention to environmental impact on Photovoltaic (PV) technology. Topics also include: environmental protection, economic growth, job creation, diversity of supply, rapid deployment, technology transfer and innovation with a free, abundant and inexhaustible fuel source. This course may not be used for major elective credit in Physics, Biophysics or Electrical Engineering.

PHYS 120-121 Staff
(E)General Physics 8 credits
(Prerequisites: MATH 103-114) General college course for pre-medical, pre-dental, biology, biochemistry and physical therapy majors. Mechanics, heat, electricity and magnetism, sound and light. Three hours lecture and two hours laboratory.

PHYS 140-141 Staff
(E)Elements of Physics 8 credits
(Co-requisite: MATH 114-221) Calculus-based introduction to the elements of physics. Topics covered: mechanics, heat, sound, light and electricity and magnetism. Required of Physics, Electrical Engineering, Mathematics, Computer Science and Chemistry majors. Three hours lecture and two hours laboratory.

PHYS 201 Dr. Varonides
(E)Stellar Evolution 3 credits
An introduction to astrophysics. A course for non-science students that concentrates on the study of the sun, stars and the universe. The evolution of the stars. Their birth, their life-times, their deaths. The remnants of the stars, and exotic entities such as neutron stars, quasars, black holes. Galaxies and galaxy formations. The expanding universe. Red shifts and cosmological principles. Grand unified theories.

PHYS 204 Prof. Berger
Information Technology 3 credits
Lectures and demonstrations are designed to describe and explain the basics of information technology and enginering for students outside the technical disciplines. It includes data representation, graphics and visual information, data compression, data transmission and network technology.

PHYS 270 Prof. Kalafut
Elements of Modern Physics 4 credits
(Prerequisites: PHYS 141, MATH 114) Introductory modern Physics course for Physics and Engineering majors; also recommended for other science majors. Review of classical physics; special theory of relativity; atomic theory of hydrogen from Bohr to Schroedinger; multielectron atoms and the periodic table; introduction to nuclear physics. Three hours lecture and two hours laboratory. Lab fulfills a writing intensive requirement (W).

PHYS 350 Dr. Fahey
Applied and Engineering Mathematics 3 credits
(Prerequisites: MATH 222, PHYS 141) First- and second-order differential equations with constant coefficients; Fourier series and Fourier transforms and Laplace transforms; partial differential equations and boundary value problems; special functions, e.g. Bessel functions and Legendre polynomials; numerical analysis and use of MAPLE software. (Also listed as ENGR 350.) Three hours lecture.

PHYS 351 Staff
Mathematical Physics II 3 credits
Functions of a complex variable. Infinite series in the complex plane. Theory of residues. Conformal mapping. Fourier and Laplace transforms. Advanced partial differential equations. Boundary value problems in Physics. Green's functions.

PHYS 352 Dr. Varonides
Statistical and Engineering Thermodynamics 3 credits
(Prerequisite: PHYS 270) Derivation of Thermodynamics from probability theory and atomic physics; Laws of Thermodynamics; Maxwell relations; chemical potential and

phase changes; refrigerators and heat pumps; theory of gasses and theory of solids. Special topics dependent upon interests of majors represented. (Also listed as ENGR 352.) Three hours lecture.

PHYS 371 Staff
Advanced Mechanics 3 credits
(Prerequisite: MATH 341) Comprehensive course in Newtonian dynamics,variational principles, Lagrange's and Hamilton's equations; theory of small oscillations and specialized non-linear differential equations in mechanical systems.

PHYS 372 Prof. Kalafut
Atomic and 3 credits
LASER Physics
(Prerequisite: PHYS 270, MATH 222) Intensive and quantitative treatment of modern atomic physics using the principles and techniques of quantum mechanics. The study of energy levels, pumping, feedback and transition rates in lasers. Required of Physics majors and highly recommended elective for electrical engineers. Three hours lecture with optional laboratory.

PHYS 447 Dr. Varonides
Electromagnetics I 3 credits
(Prerequisites: PHYS 270, PHYS 350) Analytic treatment of electrical and magnetic theory; vector calculus of electrostatic fields; dielectric materials; vector calculus of magnetic fields. (Also listed as EE 447.) Three hours lecture.

PHYS 448 Dr. Zakzewski
Electromagnetics II 3 credits
(Co-requisite: PHYS 447) Magnetic materials, electromagnetic induction, displacement currents, Maxwell's equations; radiation and waves; applications include transmission lines, wave guides and antennas. (Also listed as EE 448.) Three hours lecture.

PHYS 448L Dr. Zakzewski
Electromagnetics 1 credit
Design Laboratory
(Co-requisite: PHYS 448) Laboratory designed to emphasis and reinforce the experimental basis of electromagnetism. Multi-week projects require the student to perform experiments that measure fundamental electrical constants, the electrical and magnetic properties of matter, and the properties of electromagnetic waves. (Also listed as EE 448L.) Two hours laboratory.

PHYS 460 Dr. Fahey
Non-linear Systems 3 credits
and Chaos
This course develops the equations that describe several important non-linear systems in mechanics and in electronics and then develops the solutions. Concepts such as limit cycles, chaotic attractors, hysteresis, stability and phase space will be defined and used to understand complex systems. Classically important oscillators such as the Duffing oscillator, the van der Pol oscillator and the Lorenz equations will be solved at several different levels of approximation with several ODE solvers. Chaos, bifurcations, the routes to chaos, chaotic maps and the correspondence between maps and Poincare sections of physical systems will be studied.

PHYS 473 Dr. Connolly
Optics 3 credits
(Prérequisites: PHYS 270, MATH 341 or PHYS 350) An introduction to the principles of geometrical, physical and quantum optics. Topics to be covered include ray and wave optics, superposition, diffraction, interference, polarization, Fourier methods, and coherence theory. Practical devices such as photodetectors and light sources will also be discussed. Three hours lecture.

PHYS 474 Dr. Fahey
Acoustics 3 credits
(Prerequisite: PHYS 350) This course covers the fundamentals of vibration as applied to one-, two- and three-dimensional systems with varied boundary conditions. Transmission, absorption, attenuation, and radiation are covered. Resonators and wave guides and filters are studied along with the fundamentals of transducers. Acoustical issues in hearing are covered, time permitting.

PHYS 493-494 Dr. Spalletta and Staff
Undergraduate Physics 6 credits
Research I -II
(Prerequisite: Permission of the instructor) Students choose a research project sponsored by a member of the department and approved by the instructor and chairperson. Students gain experience with research literature, techniques, and equipment. Weekly seminars are given on quantum mechanics, mathematics tools, and topics related to ongoing research projects. A written report is required.

POLITICAL SCIENCE

DR. LEONARD W. CHAMPNEY, Chairperson

The Bachelor of Science program in Political Science imparts to students an understanding of: 1. The scope and purpose of government in civil society; 2. The origins, goals, and limitations of democratic government; 3. The structure and functions of the institutions of American government; 4. The similarities and differences in the structures and functions of the governments of other countries; and 5. The nature of the relationships among these governments in the international community.

The Political Science Department offers courses in the major subfields of political science: political institutions, political theory, international relations, comparative politics, public policy, and quantitative methods. In addition to the major in Political Science, the department offers a track in Public Administration and Public Affairs (PAPA) and a minor in Political Science.

Students in the major must take PS 130, PS 131, PS 212, PS 217, PS 240, and either PS 313 or PS 314. The remaining 21 Political Science credits required for the major are selected by the student.

PUBLIC ADMINISTRATION AND PUBLIC AFFAIRS TRACK

Political Science majors may concentrate in Public Administration and Public Affairs (PAPA). This track is designed for students who may seek a career in government service at the federal, state, or local level. It develops analytic and quantitative skills, while providing substantive knowledge of a range of public-policy problems, and the management systems designed to implement policy decisions.

Students in this track complete the courses required for the Political Science major as well as PS 135 (State and Local Government), PS 231 (The Public Policy Process), PS 232 (Public Administration), and PS 480 (Public Administration Internship). For their remaining Political Science electives, students choose 3 courses from the following: PS 216, PS 227, PS 230, PS 319, PS 322, PS 325, PS 327, PS 329.

Students in this track would complete their cognate in one of two ways. For option one students complete HIST 110-111, HIST 120-121, ECO 153, ECO 154, ACC 253, ACC 254. Option two entails completing a minor, concentration, or another special program in consultation with Dr. Champney or Dr. Harris, the PAPA track advisors.

The department also recommends that students in this concentration take INTD 224 (Q, W) Science, Decision-Making, and Uncertainty.

POLITICAL SCIENCE MINOR

To minor in Political Science a student must take a minimum of 18 credits in Political Science. PS 130 (American National Government I) and PS 131 (American National Government II) are required for the minor. The remaining 12 Political Science credits needed for the minor are selected by the student from the Political Science courses offered.

POLITICAL SCIENCE

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR	PS 130-131	American National Government	3	3
COGNATE	HIST 110-111	U.S. History	3	3
COGNATE	ELECT	Elective		3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE T/RS-PHIL	T/RS 121-PHIL 120	Theology I-Intro. to Philosophy	3	3
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			16	**16**
		SECOND YEAR		
MAJOR	PS 212-217	Comparative/Internat'l. Politics	3	3
COGNATE	HIST 120-121	Europe: 1500 to Present	3	3
COGNATE	ELECT[1]	Elective	3	
GE QUAN	QUAN ELECT	Elective		3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
		THIRD YEAR		
MAJOR	PS 240-ELECT	Pol. Science Stats-Electives	3	3
MAJOR	PS 313 or 314-ELECT[3]	Political Ideas-Electives	3	3
MAJOR	PS ELECT	Electives		3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE ELECT	ELECT [2]	Free Electives	6	6
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
			18	**18**
		FOURTH YEAR		
MAJOR	PS ELECT	Electives	6	6
COGNATE	ELECT	Electives	3	3
GE HUMN	HUMN ELECT [2]	Humanities Electives	3	3
GE ELECT	ELECT[2]	Free Electives	3	3
			15	**15**
				Total: 130 CREDITS

[1]ECO 101 and GEOG 134 are recommended as cognate electives.

[2] The department also recommends a modern foreign language in junior year with subsequent language courses to follow in senior year as part of GE humanities. The departmental advisor should be consulted.

[3]Political Science majors are required to take either PS 313 (Classical Political Ideas) or PS 314 (Modern Political Ideas). Both are strongly recommended.

PS 130-131 Staff
(S)American National Government 6 credits
PS 130 addresses the key principles of American government: democracy, constitutionalism, separation of powers, and federalism. It also discusses political parties, voting, public opinion, interest groups, and the media. PS 131 addresses the structure and functions of the branches of government: Congress, the Presidency, Bureaucracy, and the Courts. It also discusses civil rights and civil liberties.

PS 135 Staff
(S)State and Local Government 3 credits
The structures, scope, processes, and politics of state and local governments are analyzed. Also considered: the constitutional position of state and local governments; the changing relationships among federal, state and local governments; and policy areas of interest to students in the class (educational policy, criminal justice policy, etc.).

PS 212 Dr. VanDyke
International Relations 3 credits
This course examines the prominent tenets of IR as an academic discipline. Secondly, students are provided with basic knowledge and tools for analyzing the international system as it unfolds today. A constant theme is bridging the gap between theory and practice of international relations.

PS 213 Dr. Parente
(D) Modern Africa 3 credits
An introduction to the politics of major African states with emphasis on ethnic, racial, and religious tensions as well as the geopolitics of the region.

PS 216 Dr. Harris
(D)Women's Rights and Status 3 credits
Public policies (formal and informal) and their implementation determine the rights of citizens. This course examines public policies that impact the legal, political, economic, and social status of women in the U.S.A. An historical exploration of women's rights will be the foundation for the examination of women's rights and status today. The future prospects of women's rights and status will also be discussed. Where time and resources are available, comparisons with the rights of women in other nations and discussion of the impact of American policies on women in other nations will also be undertaken.

PS 217 Dr. Parente
Comparative Government 3 credits
Political institutions of Germany, France, Britain, and selected Third World nations are analyzed with focus on elections, parties, interest groups and foreign policies.

PS 218 Dr. Parente
East European Politics 3 credits
This course examines the history and politics of East Europe from Poland to the Balkans and from Germany to the Ukraine during the twentieth century. Special attention is given to ethnic politics before and after the communist period and the economics of the new privatization and its problems.

PS 219 Dr. Kocis
Survey of Latin American Politics 3 credits
An overview of the political cultures and political dynamics of Latin America. A series of representative nations is examined to provide a general overview of the region. Topics include historical figures and events, the processes of democratization and modernization, and issues in comtemporary politics.

PS 220 Dr. Kocis
(S, D)Ideologies 3 credits
A study of the three major political ideologies that shaped the twentieth century (communism, facism, and liberalism) and of those that may shape the twenty-first: feminism, racism, egalitarianism, environmentalism, libertarianism, and communitarianism.

PS 221 Dr. Parente
Politics of Southeast Asia 3 credits
Domestic ethnic and religious politics of Southeast Asia and international politics affecting the region. The ASEAN nations (Thailand, Indonesia, Malaysia, Philippines, Singapore, and Brunei) and Burma, the region's only socialist country, as well as the three communist states of Indochina: Vietnam, Laos, and Cambodia are considered; spheres of influence and capitalism versus state socialism as a lever of economic development are also discussed.

PS 222 Dr. Parente
Politics in Russia 3 credits
This course considers Russian politics and colonialism from the Revolution to contemporary economic efforts to move toward capitalism. The politics of the remnants of the Soviet empire are examined and Stalin and the Bolshevik experiment are also examined.

PS 227 Dr. Harris
(D)Women, Authority and Power 3 credits
The majority of U.S. citizens are women. Women have the same political rights as men. Yet, in our representative democracy, women are a minority of elected government officials, appointed government officials, and top bureaucrats. While American women have always been involved in pressure politics historically, their concerns have not been found on the agendas of governments. This course studies the historical and current paradox of women and U.S. public policy decision making. It examines the role of women in pressure politics, their integration into positions of political authority, and the future prospects for the political power and authority of women.

PS 230 Dr. Champney
(S)Environmental Policy 3 credits
Introduction to the study of environmental policy in the United States: air pollution; water pollution; land management and conservation; toxic waste and solid waste disposal; and the regulation of nuclear power. Emphasis on the role of legislative, executive, and judicial institutions in shaping the content of policy, as well as a discussion of the impact of federalism. Brief introduction to international environmental cooperation and conflict.

PS 231 Dr. Champney
The Public Policy Process 3 credits
Description and analysis of the public policy process in the United States with emphasis on the technical and political problems of policy formulation and implementation. Discussion of the impact of legislative, executive and judicial institutions and processes on the content of public policy.

PS 232 Dr. Harris
Public Administration 3 credits
A study of the structures, scope and processes of American public bureaucracies. The growth of the executive branches of governments, the role of public bureaucracies in our democratic government, and the experiences of American public bureaucrats are analyzed.

PS 240 Dr. Champney
(Q,W)Political Science Statistics 3 credits
Introduction to the quantitative and statistical research methods employed by social/behavioral scientists in general and political scientists in particular: contingency table analysis, the chi squared statistic, simple correlation, partial correlation, and multiple regression. Special emphasis on survey research and public opinion polling: probability sampling, questionnaire construction, and survey administration.

PS 280 Dr. Homer
Pre-Law Internship 3 credits

PS 310 Staff
Judicial Politics 3 credits
Role of the federal and state court systems in our constitutional democracy, with an emphasis on their policy-making functions. Consideration of the factors shaping the judicial philosophies and political orientations of federal and state justices and judges.

PS 311-312 Dr. Kocis
Constitutional Law 6 credits
An examination, by means of case law, of the tensions between the demands of liberty and the demands of democracy within the American Constitution. Topics include federalism, the separation and division of powers, social issues tied to industrialization and urbanization, commercial and property rights, and the rights of the poor and the oppressed as they arise in our legal framework.

PS 313 Dr. Kocis
(D)Classical Political Ideas 3 credits
An examination of philosophical questions about politics (including the nature of law, morals, justice, and authority; and the role of ideas in political and social life) in classical texts from East and West, from Lao Tzu and Plato to the beginnings of modernity and Machiavelli.

PS 314 Dr. Kocis
(D)Modern Political Ideas 3 credits
An examination of philosophical questions and politics (including the nature of law, morals, justice, and authority; and the role of ideas in political and social life) in modern texts from East and West, from the beginnings of modernity with Machiavelli to Marx and Mao.

PS 315 Dr. Kocis
Contemporary Political Thought 3 credits
A study, based on primary materials, of the current state of the controversies in contemporary political thinking. A wide range of perspectives, from far left to far right, will be analyzed and critically examined. Minimally, the works of John Rawls, Robert Nozick, C.B. MacPherson, Isaiah Berlin, and Leo Strauss will be included.

PS 316 Dr. Kocis
Jurisprudence 3 credits
An examination of the differences between "the law" and "the laws"; the nature of legal systems; the nature and grounds of political, moral and legal obligations, and the controversy between the traditions of Natural Law and Positive Law.

PS 317 Dr. Champney
Parties, Elections, and Interest Groups 3 credits
Discussion of the historical development and current status of political parties and interest groups in the United States, and their role in electoral politics. Emphasis on the functions performed by political parties in our system vs. their functions in other systems, such as parliamentary democracies. Emphasis also on factors shaping the creation, maintenance, and political power of organized interest groups.

PS 318 Dr. VanDyke
(W) U.S. Foreign Policy: Cold War and Aftermath 3 credits
Examines and analyzes critically the content of American foreign policy in the Cold War and post-Cold War eras. Special emphasis on themes, goals and means of American foreign policy, particularly national security.

PS 319 Dr. VanDyke
(W) U.S. Foreign Policy Process 3 credits
Examines the actual formulation and implementation of American foreign policy within the decision-making process. Analyzes what the process is, who the decision makers are, and internal and external variables of policy-making in the U.S. Involves at least two in-depth American foreign policy case studies.

PS 322 Dr. Harris
Public Personnel 3 credits
(Prerequisites: At least two of PS 130, 131, 135, 231, 232 or permission of instructor) An examination of public-personnel administration and management. Theories of organization, personnel choices, personnel management, civil-service history, and current issues in personnel administration and management are considered.

PS 325 Dr. Harris
Politics of the Budgetary Process 3 credits
(Prerequisites: At least two of PS 130, 131, 135, 231, 232 or permission of instructor) Public budgeting in theory and in practice is discussed. Historical reforms and the inevitable politics of the process are considered. Use of budget simulations allow for practical experience.

PS 326 Dr. Kocis
Theories of Political Economy 3 credits
An examination of the works of the great thinkers in the tradition of the political economy, and an extensive study of the historical evolution of theories of value, the creation of value and the increase of productive abilities.

PS 327 Dr. Champney
The U.S. Congress 3 credits
An examination of the historical development of the legislative branch of government; its prominence over the executive branch in the nineteenth century and decline in the twentieth century. Emphasis on theories of representation and on the policy-formulation process.

PS 328 Dr. Parente
(D)Modern China 3 credits
Study of modern Chinese politics in the nineteenth and twentieth centuries. Problems of modernization, Westernization, and communism in the People's Republic of China.

PS 329 Dr. VanDyke
The American Presidency 3 credits
This course will focus on the American Presidency — historical development, powers of the office, elections, models of the presidency and, to a lesser extent, the relations between the President and congress, and the President and the judiciary.

PS 330 Dr. Van Dyke
Western Europe in World Affairs 3 credits
This seminar provides an historical, political, and analytical foundation for understanding the profound political and economic changes facing Europeans today. This involves studying the two world wars, the formation of Cold-War alliances and security systems, the European integration movement, the foreign policies of major European states, and organization of post-Cold War Europe.

PS 331 Dr. Van Dyke
(W)The European Union 3 credits
(Enrollment only by permission from the professor.) Provides an in-depth study of the European Union and its fifteen member states in order to prepare students for an intercollegiate simulation of the EU, which is held in Washington, D.C., each December. Students examine the EU's theoretical and historical foundations, its institutions and policy procedures, and the ongoing challenges for European integration.

PS 332 Dr. Parente
(D) Modern Japan 3 credits
This course examines the history and politics of Japan: the period of the shoguns; the reforms of the modernizing Meiji era at the end of the nineteenth century; the Japanese effort to conquer Asia; the postwar political structure; the question, "Is Japan a democracy?"; and the economic miracle of the present.

PS 338 Dr. Parente
Politics of Islam 3 credits
This course examines political ideology of Islam; the political content of the Koran; the effort to establish theocracies in a number of states from Iran to Egypt to Malaysia and Indonesia; Islam as a political opposition in such countries as the Philippines, Russia, and China; Shiite versus Sunni sects; the politics of Israel and the Islamic states of the Middle East; OPEC; the Palestinian question; political terrorism; Islam as an expansionist ideology.

PS 384 Staff
Special Topics in Political Science 3 credits
Study and analysis of selected topics in the field of Political Science. The particular topic or topics will vary from year to year depending on the instructor and changing student needs.

IS 390 Staff
(W) Seminar in International Studies 3 credits
Required for International Studies majors. Other advanced undergraduates may take this course with permission of the professor. This course can count for either Political Science credit or History credit.

PS 480 Dr. Champney
Public Administration Internship I 3 credits
Permission of faculty advisor and Dr. Champney required for internship registration.

PS 481 Dr. Champney
Public Administration Internship II 3 credits
Permission of faculty advisor and Dr. Champney required for internship registration.

SPAN/PS 295 Drs. Kocis, Parsons
(S, D) Contemporary Mexican Culture and Language 3 credits
A six-credit intersession travel course to Guadalajara, Mexico, for three credits in Humanities (foreign language area, intermediate and/or advanced level), three credits in the social sciences (political science), as well as cultural diversity credit. The course is team-taught by University of Scranton faculty from the Departments of Foreign Languages and Political Science with assistance from Mexican faculty at UNIVA.

PSYCHOLOGY

DR. JAMES P. BUCHANAN, Chairperson

Psychology provides a unique educational experience of quality, breadth and flexibility. Our curriculum has been carefully designed to give students a balanced education in the discipline and the widest range of career options, from baccalaureate entry-level positions to graduate training in prestigious universities. According to a recent independent study, the number of the University's graduates who have gone on to receive doctorates in psychology has placed us in the top 10% of comparable institutions nationally.

Psychology majors are required to take PSYC 110, PSYC 210, PSYC 330 with lab, PSYC 390 (fall-junior year), and PSYC 490-491 (senior year). Students also take a minimum of five courses from the following list with at least one course in each group: Physiological Processes (230, 231), Learning Processes (234, 235), Social-Developmental Processes (220, 221), and Individual Processes (224, 225). Students are free to choose from any of these or the remaining Psychology courses to fulfill the four additional course requirements in the major. Completion of two optional Psychology laboratory courses constitutes an elective course. Students are encouraged to take PSYC 493-494 (Undergraduate Research) in their junior or senior year.

The Psychology Department encourages students to tailor their programs to their own needs and interests. For example, students interested in marketing, personnel, or industrial-organizational psychology may elect a business minor and recommended courses in Psychology. Interdisciplinary programs, such as the Human Development Concentration, and dual majors with a number of other departments are also available. Students should consult their advisor and the Psychology Handbook for recommended courses, both major and cognate, tailored to their interests.

To avoid duplication of course content, Psychology majors may not register for the following courses: HS 111, Introduction to Human Adjustment; HS 242, Counseling Theories; HS 293, research methods in Human Services; and HS 323, Psychiatric Rehabilitation. Students who wish to declare a minor or a second major in Human Services should consult their advisor and the chair of Human Services with regard to the above course restrictions.

MINOR. A minor in Psychology consists of PSYC 110, PSYC 210, PSYC 330 lecture, and one course from three of the following four groups: Physiological Processes (230, 231), Learning Processes (234, 235), Social-Development Processes (220, 221), and Individual Processes (224, 225). An equivalent statistics course and/or an equivalent methods course may be substituted for PSYC 210 (Statistics) and/or PSYC 330 (Research Methods). Contact the Department Chair for a list of these courses. Any substituted course must then be replaced with a three-credit Psychology course.

Total: 18 credits in psychology.

PSYCHOLOGY

	Dept & No
MAJOR	PSYC 110[5]-ELECT
GE C/IL	C/IL 102
GE QUAN	MATH[1]
GE S/BH	SOC 110[2]
GE WRTG-SPCH	WRTG 107-COMM 100
GE HUMN	HUMN ELECT
GE PHIL	PHIL 120-210
GE FSEM	INTD 100
GE PHED	PHED ELECT
MAJOR	PSYC 210-330
MAJOR	MAJOR ELECT
GE ELECT	WRTG 211[2]
GE NSCI	NSCI ELECT[3]
GE S/BH	S/BH ELECT
GE HUMN	HUMN ELECT
GE PHED	PHED ELECT
MAJOR	PSYC 390
MAJOR	MAJOR ELECT
GE ELECT	ELECT
GE HUMN	HUMN ELECT
GE PHIL-T/RS	T/RS 121-122
MAJOR	MAJOR ELECT
MAJOR	PSYC 490-491
GE PHIL-T/RS	PHIL-T/RS ELECT
GE ELECT	ELECT

Descriptive Title of Course	Credits	
FIRST YEAR	**FALL**	**SPRING**
Fund. of Psyc.[5]-Psyc. Elective	3 ½	3
Computing and Information Literacy	3	
Elective[1]		3
Intro. to Sociology[2]	3	
Composition-Public Speaking	3	3
Humanities Elective		3
Introduction Philosophy-Ethics	3	3
Freshman Seminar	1	
Physical Education		1
	16 ½	**16**
SECOND YEAR		
Statistics-Research Methods	3	5
Psychology Electives	3	3
Technical & Business Writing[2]	3	
Natural Science Electives[3]	3	3
Social/Behavioral Elective		3
Humanities Elective	3	
Physical Education	1	1
	16	**15**
THIRD YEAR		
Academic & Career Dev. in Psychology	1	
Psychology Electives	6	9
Electives	3	3
Humanities Electives	3	3
Theology I-Theology II	3	3
	16	**18**
FOURTH YEAR		
Psychology Elective	3	
Hist. & Lit. of Psych. I & II	2	1½
Philosophy or T/RS Elective	3	
Free Electives	9	15
	17	**16½**
		Total: 131 CREDITS

[1] Math 103 or 106 or 109 or 114

[2] The department strongly recommends WRTG 211 (Technical & Business Writing) in preparation for Research Methods and higher-level Psychology courses, and SOC 110 (Intro. to Sociology).

[3] BIOL 101 and either BIOL 201(Anatomy and Physiology) or BIOL 202 (The ABC's of Genetics) or BIOL 110-111 or BIOL 141-142. Lab credits for BIOL 110-111 and 141-142 can be placed in GE Elective areas.

[4] No more than 15 credits of Psychology electives may be placed in the free elective area.

[5] Entering Fall semester Freshmen enrolled in the majors only PSYC 110 section must also enroll in PSYC 110L. PSYC 110L is required only for entering Fall semester Freshmen.

PSYC 105 Dr. Cannon

(E)Brain and Human Nature 3 credits

An examination of the human mind, brain and why we are the way we are. Topics include: the mind-body problem, the nature of consciousness, the evolution of behavior, addictions (e.g., love), eating disorders, depression, and aggression. (Credit cannot be earned for this course and PSYC 231; not open to Psychology majors or minors.)

PSYC 106 Dr. Cannon

(E)Drugs and Behavior 3 credits

This course will examine interactions between drugs and behavior. Behavioral topics will include: tolerance, addiction, learning, aggression, sexual behavior, eating, anxiety, depression and schizophrenia. Drug/drug categories will include: alcohol, cannabis, opiates, antidepressants and anti-anxiety. (Credit cannot be received for this course and PSYC 384, Psychopharmacology; not open to Psychology majors or minors.).

PSYC 110 Staff
(S)Fundamentals of Psychology 3 credits
An introduction to the scientific study of behavior through a survey of psychology's principal methods, content areas and applications. Course requirements include participation in psychological research or preparation of a short article review.

PSYC 110L Staff
Demonstrations For Fundamentals of Psychology .5 credits
This lab is offered only in the fall semester and is restricted to entering freshmen Psychology majors. The lab will be taken in conjunction with the section of PSYCH 110 for freshman Psychology majors. It will be team taught by the psychology faculty and will entail exercises, simulations and applications. This course is required only for students who enter the University as freshmen Psychology majors and who are enrolled in the Psychology majors' fall section of PSYC 110. Students who transfer into psychology need only to take PSYC 110 or its equivalent. The course is graded pass/fail. The course is open only to Psychology majors.

PSYC 210 Drs. Baril,Hogan
(Q)Statistics in the Behavioral Sciences 3 credits
An introduction to the basic statistics in the behavioral sciences, including organization and display of data; measures of central tendency; variability; correlation and regression; one- and two-sample t-tests; confidence intervals, one-way and two-way analysis of variance, chi-square; and consideration of effect size, power, and null hypothesis testing including types of errors. Students will be introduced to the computerized statistical-analysis package SPSS-PC.

PSYC 220 Dr. Baril
(S)Social Psychology 3 credits
(Prerequisite: PSYC 110) Social determinants of behavior from a psychological perspective. Topics include liking, love, conformity, persuasion, attitude change, and person perception.

PSYC 221 Drs. Buchanan, Slotterback
(S)Childhood and Adolescence 3 credits
(Prerequisite: PSYC 110) Survey of psychological research dealing with the development and behavior of children. The physical, cognitive and social aspects of development, from infancy to adolescence, are considered.

PSYC 222 Dr. Slotterback
(S)Adulthood and Aging 3 credits
(Prerequisite: PSYC 110) Survey of psychological research dealing with the age-graded aspects of behavior in adulthood. Course will consider the physical, cognitive and social aspects of the aging process from late adolescence to death. Topics include occupation selection, marriage, parenthood, middle age, retirement and dying.

PSYC 224 Dr. Slotterback
(S)Personality 3 credits
(Prerequisite: PSYC 110) A survey and critical evaluation of personality and its implications for assessment, psychotherapy, and research.

PSYC 225 Drs. Alford, Norcross
(S)Abnormal Psychology 3 credits
(Prerequisite: PSYC 110) A comprehensive survey of mental and behavioral disorders from biological, psychological, and sociocultural perspectives. The course will consider diagnosis and labeling, overview of specific disorders, and various treatment approaches.

PSYC 230 Dr. O'Malley
Sensation and Perception 3-4 credits
(Prerequisite: PSYC 110) Concerns the study of sensory mechanisms and perceptual phenomena. Optional lab entails supervised individual experimentation. Three credits lecture and optional one credit laboratory. Lab fee; lab offered only in spring.

PSYC 231 Dr. Cannon
(E)Behavioral Neuroscience 3-4.5 credits
(Prerequisite: PSYC 110 or BIOL 141-142) Introduction to the field of neuroscience, examining the cellular bases of behavior, effects of drugs and behavior. brain/body correlates of motivation and emotion, and neural changes accompanying pathology. Three hours lecture and optional 1.5 credit laboratory. Lab fee; lab offered fall only.

PSYC 234 Dr. Buchanan
(S)Cognitive Psychology 3-4 credits
(Prerequisite: PSYC 110) Considers a number of approaches to the study of human cognitive processes with an emphasis on the information-processing model. Topics include pattern recognition, attention, memory, imagery, concepts and

categories, and problem solving. Three credits lecture and optional one credit laboratory. Lab fee; fall only.

PSYC 235 Staff
Conditioning and Learning 3-4.5 credits
(Prerequisite: PSYC 110) Concerns the experimental study of both classical and instrumental conditioning. Optional lab involves supervised animal and human experimentation. Three credits lecture and optional 1.5 credit laboratory. Lab fee; spring only.

PSYC 236 Dr. Baril
Industrial/Organizational Psychology 3 credits
(Prerequisite: PSYC 110) The psychological study of people at work. Topics include personnel selection and training, motivation, leadership, the physical work environment, and computer applications. Fall only.

PSYC 237 Staff
(D, S)Psychology of Women 3 credits
(Prerequisite: PSYC 110) Examines the biological, sociological and cultural influences on the psychology of women. Topics include gender socialization, sex roles, and the impact of gender on personality, communication, achievement, and mental health. Fall, every other year.

***Special Topics** in Psychology courses at the 200 level are developed by individual faculty to provide in-depth coverage of a specific area. Prerequisites are PSYC 110 and at least sophomore status. This course and PSYC 384 may be used only once to satisfy major elective requirements.*

PSYC 284 Drs. Norcross & Cannon
Special Topics: 3 credits
Behavior Modification

PSYC 284 Dr. O'Malley
Special Topics: 3 credits
Sports Psychology

PSYC 284 Staff
Special Topics: 3 credits
Psychology of Language

PSYC 330 Drs. Baril, Cannon,
Research Methods Hogan, Slotterback
in the Behavioral Sciences 5 credits
(Prerequisites: PSYC 110, a grade of C or higher in PSYC 210) A survey of scientific method and research design in the behavioral sciences. Topics include single subject, survey, correlational and experimental research. Lecture and lab involve computerized data analyses. Lab also includes supervised research and scientific writing. Three credits lecture, two credits laboratory. Lab fee; spring only. The laboratory is writing-intensive (W).

PSYC 335 Drs. Hogan, Norcross
(W)Psychological Testing 3 credits
(Prerequisites: PSYC 110, a grade of C or higher in PSYC 210) Provides a thorough grounding in principles of testing and a review of the major types of assessment, including intellectual, personality, and interest.

PSYC 360 Dr. Norcross
(W)Clinical Psychology 3 credits
(Prerequisites: PSYC 110, a grade of C or higher in PSYC 225) An overview of contemporary clinical psychology focusing on its practices, contributions and directions. Topics include clinical research, psychological assessment, psychotherapy systems, community applications, and emerging specialties, such as health and forensic psychology. Fall only.

***Special Topics** courses at the 300 level are developed by individual Psychology faculty to provide in-depth coverage of a specific area. Prerequisites include PSYC 110, at least sophomore status, and other Psychology courses as determined by the instructor. This course and PSYC 284 may be used only once to satisfy major elective requirements.*

PSYC 384 Dr. Cannon
Special Topics: 3 credits
Psychopharmacology
(Prerequisite: a grade of C or higher in PSYC 231)

PSYC 384 Dr. Alford
Special Topics: 3 credits
Cognitive Psychotherapies
(Prerequisite: a grade of C or higher in PSYC 225)

PSYC 384 (Area I) Dr. Hogan
Special Topics: 3 credits
Multivariate Statistics
(Prerequisite: a grade of C or higher in PSYC 210)

PSYC 390 Staff
Academic and Career Development in Psychology 1 credit
(Prerequisites: Junior standing, Psychology major) This seminar, designed for Psychology majors in their junior year, will entail studying, discussing, and applying information on academic planning, career development, and graduate school. Course requirements include attendance at several academically-related department events or psychologically-related university presentations. Graded Satisfactory/ Unsatisfactory. Offered fall only.

PSYC 480 Drs. Norcross, Alford
Field Experience in Clinical Settings 3 credits
(Prerequisites: a grade of C or higher in PSYC 225, PSYC 335, PSYC 360, and permission of instructor) This course entails supervised field experience in a mental-health or social-service facility in the community. Students are required to spend 8 hours a week at their placement and 1.5 hours a week in a seminar throughout the semester. The professor provides classroom instruction, and the on-site supervisor provides clinical supervision. Limited to Juniors and Seniors; graded Satisfactory/Unsatisfactory.

PSYC 481 Dr. Baril
Field Experience in Personnel Psychology 3 credits
(Prerequisites: a grade of B or higher in PSYC 236 and 335, MGT 361, and permission of the instructor) This course entails supervised field experience in a personnel office. Students are required to spend 10 hours a week at their placement and one hour periodically throughout the semester in a seminar. Limited to Juniors and Seniors; graded Satisfactory/ Unsatisfactory. Offered as a reader.

PSYC 490 Dr. O'Malley
History and Literature of Psychology I 2 credits
(Prerequisites: Senior standing, Psychology major or minor) This lecture-and discussion-course will examine the history of modern psychology from pre-Socratic philosophers to contemporary perspectives. Emphasis will be placed on the influential works of various schools of thought that have shaped the emergence of psychology. Fall only.

PSYC 491 Staff
(W)History and Literature of Psychology II 1.5 credits
(Prerequisite: Senior standing, a grade of C or higher in PSYC 490) This seminar, designed for students with a major or minor in Psychology, will entail critical reading, analysis, and discussion of selections from the seminal literature in psychology, including selected works of William James, Sigmund Freud, and B.F. Skinner. Individual professors will choose additional readings on the basis of their interests and student preferences. Spring only.

PSYC 493-494 Staff
Undergraduate Research 3-6 credits
(Prerequisites: PSYC 330, a grade of B or higher in PSYC 330 lecture and the Psychology course most relevant to research topics, and permission of professor) Individual study and research on a specific topic under the supervision of a faculty member. Students are expected to spend a minimum of 10 hours a week on research activities throughout the semester. Limited to Juniors and Seniors.

SOCIOLOGY

PROF. JOSEPH F. CIMINI, Esq., Chairperson

Courses in Sociology are designed to meet the intellectual and career interests of students who are concerned about what is happening in their society and in their daily personal interaction with other people. The courses are designed to help the student interested in Social Work, Human Services, Industrial Organization, Urban Planning, etc., to attain a pre-professional orientation to these fields.

Students interested in Urban Planning are advised to include SOC 116, 224, and 231 in their electives; for Social Work, SOC 234, 115, 116, 118, and 224; for Medical Services/Administration, SOC 216, GERO 212, 216, 218, and 230; for Human Resources/Administration, SOC 226, 227, and 228.

The Department of Sociology/Criminal Justice also administers the Criminal Justice major described earlier and the Gerontology major described on the next page.

SOCIOLOGY

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
MAJOR	SOC 110-112	Intro. to Sociology-Social Problems	3	3
GE S/BH	PSYC 110	Fundamentals of Psychology	3	
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE QUAN	S/CJ 215	Statistics for the Social Sciences		3
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	3	3
GE HUMN	HUMN ELECT	Humanities Elective		3
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			16	**16**
		SECOND YEAR		
MAJOR	SOC 318-224	Sociological Theory-American Minority Groups	3	3
MAJOR	SOC 211 -SOC ELECT	Methods of Social Research-Sociology Elective	3	3
COGNATE	HS 241	Case Management and Interviewing		3
GE S/BH	GERO 110	Introduction to Gerontology	3	
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
		THIRD YEAR		
MAJOR	SOC ELECT	Sociology Electives	3	3
COGNATE	ELECT [1]	Political Science Elective	3	
COGNATE	ELECT [1]	Psychology Elective		3
GE ELECT	ELECT [1]	Social Science Electives	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
GE HUMN	HUMN ELECT	Humanities Elective		3
GE ELECT	ELECT	Free Electives	3	3
			18	**18**
		FOURTH YEAR		
MAJOR	SOC ELECT	Sociology Electives	6	3
MAJOR	SOC 480-481 or ELECT[2]	Internships or Electives	3	3
COGNATE	ELECT [1]	Social Science Electives	3	6
GE ELECT	ELECT	Free Electives	3	3
			15	**15**

Total: 130 CREDITS

[1] In the cognate Social Science electives, the department recommends a mix of Human Services, Criminal Justice, Gerontology, Political Science and Psychology electives, especially PSYC 224 (Personality).

[2] Department Recommendation - The social-work internship may be taken in either the junior or senior year, or both (not to exceed a maximum of six credits of internship).

MINOR: A minor in Sociology will require 18 credits. There are three required courses: SOC 110, SOC 112, and SOC 318. The following elective courses are strongly recommended by the department in the Sociology sequence: SOC 234, SOC 231, SOC 224, and SOC 226.

GERONTOLOGY

The degree program in Gerontology has the following objectives:

1. To understand the processes of aging;
2. To prepare for careers in agencies and institutions serving the older adult, such as area agencies on aging, family services, long-term care facilities, federal, state, and local governmental agencies, retirement communities, business and industry, etc.;
3. To provide a liberal gerontology education with special emphasis on the development of the whole person; and
4. To provide students with academic preparation for advanced study in gerontology, social work, public administration, social welfare and related fields.

The Scranton area is especially suited to serve as a laboratory setting for gerontology education with its high proportion of older adults and its many agencies and facilities for the same. The department has established an Advisory Board in Gerontology composed of practitioners in the field: health specialists, community leaders, and senior citizens. The Advisory Board will help to ensure that the program curriculum is current.

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR	SOC 110	Introduction to Sociology	3	
MAJOR	GERO 110	Introduction to Gerontology		3
GE S/BH	PSYC 110	Fundamentals of Psychology	3	
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE QUAN	S/CJ 215	Statistics for the Social Sciences		3
GE PHIL	PHIL 120	Introduction to Philosophy	3	
GE T/RS	T/RS 121	Theology I		3
GE HUMN	HUMN ELECT	Humanities Elective		3
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			16	**16**
		SECOND YEAR		
MAJOR	SOC 211-GERO 218	Methods of Soc. Research-Health & Aging	3	3
MAJOR	GERO 232-230	Aging and Death-Social Policy and Aging	3	3
COGNATE	HS 241	Case Management and Interviewing	3	
GE S/BH	SOC 224	American Minority Groups		3
GE PHIL	PHIL 210	Ethics	3	
GE T/RS	T/RS 122	Theology II		3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
		THIRD YEAR		
MAJOR	GERO ELECT[1]	Gerontology Electives	3	3
COGNATE	PSYC 222-SOC 228	Adulthood and Aging-Social Psychology	3	3
COGNATE	HADM 112-SOC SCI	Health Systems-Social Science Elective	3	3
GE NSCI	NSCI ELECTIVES	Natural Science Electives	3	3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
GE HUMN	HUMN ELECT	Humanities Elective		3
GE ELECT	ELECT	Free Electives	3	3
			18	**18**
		FOURTH YEAR		
MAJOR	GERO ELECT	Gerontology Electives	3	6
MAJOR	GERO 480-481/ELECT[1]	Internships/or Electives	3	3
COGNATE	ELECT	Social Science Electives	6	3
GE ELECT	ELECT	Free Electives	3	3
			15	**15**
			Total: 130 CREDITS	

[1] Department recommendation - The Gerontology Internship may be taken in either the junior or senior year, or both (not to exceed a maximum of six credits of internship).

MINOR: A minor in Gerontology will require 18 credits - There are three required courses: SOC 110, GERO 110, and GERO 230. The following elective courses are strongly recommended by the department in the Gerontology sequence: GERO 218, GERO 216, GERO 212, GERO 232.

SOC 110 Staff
(S)Introduction to Sociology 3 credits
Fundamental principles in the field of sociology. Stratification, ethnicity, deviance; basic institutions of society; social change and demographic trends.

SOC 112 Staff
(S)Social Problems 3 credits
Application of sociological principles to major issues in contemporary society.

SOC 115 Prof. Naughton, Prof. Pryle
Introduction to Social Work 3 credits
Growth of social work as a professional endeavor. The scope of social work; casework in the medical, psychiatric, family and child-welfare, and guidance fields, community organization, social research, social planning, social group work. Current trends in social work.

SOC 116 Prof. Pryle
Community Organization 3 credits
A general introduction to the field and process of community organization, both as a field of social work and as a field of human endeavor. The coordination and financing of welfare activities, methods of appraising community needs and resources, planning and the initiation of welfare services. Services of a voluntary and governmental nature, strategies of power.

SOC 118 Prof. Baldi, Prof. Pryle
Child Welfare 3 credits
Development of child-welfare in the United States. Educational, health, recreational and child-labor regulations. Study and treatment of children in their own homes, foster homes and institutions. Child care and protective programs on federal, state and local levels.

SOC 132 Dr. Yamanouchi-Rynn
Introduction to Archaeology 3 credits
An introduction to the study of archaeology from anthropological and historical perspectives. Areas to be explored include survey and site recognition, excavation planning, record keeping, treatment of artifacts, and above-ground archaeology.

SOC 210 Dr. Wolfer
(D, W)Marriage and the Family 3 credits
An historical, comparative, and analytical study of marriage and family institutions. Problems of courtship, mate selection and marriage adjustment in modern society.

SOC 211 Dr. Wolfer
Methods of Social Research 3 credits
This course is designed to help the student understand the range of research methods used in sociological and gerontological research/investigations and evaluate their strengths and weaknesses. It will also help students to appreciate some basic problems involved in the collection and analysis of data.

SOC 212 Prof. Pryle
Religion and Society 3 credits
A survey of religious systems and their interrelations with society and social institutions, with emphasis on the social consequences and determinants of religious behavior. The theories of Durkheim, Weber, Parsons, Bellah, Berger and Luckman will be examined.

SOC 213 Staff
Collective Behavior and Social Movements 3 credits
This course will examine collective behavior which includes protest demonstrations, riots, mass or diffuse phenomena such as fads and crazes, social movements, and revolution, with a decided emphasis on social and political movements. This course is recommended for those interested in sociology, political science, history, or other social sciences.

SOC 214 Staff
Sociology of Sport 3 credits
The role of sport in civilized societies; sport as work and recreation; women and minorities in sport; sport in education; sport and the mass media.

SOC 215 Dr. Randol
Feminism and Social Change 3 credits
This course will examine the relationship between feminism and social change. We will explore and study the feminist movements, and how feminist ideologies, strategies, and individuals influenced social movements. We will also explore the outcomes of women's movements in terms of successes and failures, as well as the backlash and mobilization of counter-movements. Specifically, we will examine the impact and consequences of feminism for society, for various organizational and professional roles and for individual women in everyday life.

SOC 216 Prof. Naughton, Prof. Pryle
Medical Sociology 3 credits
The social dimensions of health and illness; role of physician, nurse and patient; social organization of health services; the content of medical practice; culture and health disorders; mental health and mental illness.

SOC 217 Dr. Wolfer
(D,W) Family Issues and and Social Policy 3 credits
This course is designed to examine four problems of the family: the issue of work and the family (including poverty); separation and divorce; family violence; and elder care. Eash issue will be addressed individually in terms of description of the social problem and why it exists and the program/policies that are designed to address these problems. **This is a service learning course** where students will be exposed to the policies that address these problems and help them to apply a multicultural interpretation to these situations.

SOC 224 Prof. Pryle, Dr. Yamanouchi-Rynn
(S, D)American Minority Groups 3 credits
Patterns of adjustment between ethnic and racial groups, with special attention given to the American scene. Prejudice and discrimination as opposed to the democratic ideology.

SOC 226 Prof. Naughton
Sociology of Work and Professions 3 credits
The nature and role of contemporary occupations and professions in the life cycle are discussed; occupational choice, career patterns and occupational mobility are noted. The student is made aware of the relationship among education, work and aspirations. The career path from entry-level job to retirement is examined.

SOC 227 Dr. Yamanouchi-Rynn
Business and Society 3 credits
Modern industrialism as social behavior. Social conditions in the rise of industrialism and their effect on the worker; collective bargaining and industrial conflict, the industrial community; social classes and the industrial order. This course will also show how the business sector impacts on society and on the globalization of the economy.

SOC 228 Dr. Yamanouchi-Rynn
Social Psychology 3 credits
Study of individual behavior as affected by cultural and social stimuli. Emphasis on the analysis of human conduct in social settings.

SOC 229 Staff
Crisis in Population 3 credits
A study of the basic variables of population, birth, death and migration, socioeconomic and cultural variables affecting population-growth, projections and forecasts. The chief natural and social demographic theories. Population policies and practices in selected world areas.

SOC 231 Prof. Pryle
Urban Sociology 3 credits
Urban ecology and culture as the dominant form of community life in contemporary society; their characteristics, peculiarities, and problems.

SOC 232 Prof. Cimini
(D)Great American Cities 3 credits
A sociological trip through 20 selected major U.S. cities will encounter a variety of cultures and examine that matrix of ideas, creeds, religions, races, ethnicities, attitudes, habits, artifacts and institutions - social, educational, artistic, political, and economic - which condition the way the people in each city lives.

SOC 234 Dr. Yamanouchi-Rynn
(S, D)Cultural Athropology 3 credits
Cultural and social organization among primitive or preliterate societies; marriage, property, religion, magic and tribal control. Significance of the study of primitive cultures for understanding of urban industrial civilizations.

SOC 235 Dr. Yamanouchi-Rynn
Peoples of East Asia 3 credits
The anthropology of the East Asian culture area, focusing particularly on China and Japan. Topics include basic social institutions, world views, culture and personality, and the problem of modernization.

SOC 284 Staff
Special Topics in Sociology
(Prerequisite: consent of the chairperson and the instructor) Courses designed to meet specific needs of individual students or courses offered on a trial basis to determine the value of placing them into the regular curriculum.

SOC 318 Prof. Pryle
Sociological Theory 3 credits
An examination of the major theoretical developments in sociological theory from the classical period of Marx, Weber, and Durkheim to contemporary schools such as structural-functionalism, conflict theory, exchange theory, and symbolic interaction.

SOC 382-383 Staff
Independent Study 3 credits
in Sociology
Designed for advanced students who are capable of independent study. A program of planned research under the guidance of a faculty member. Registration upon approval of chairperson and instructor.

SOC 480-481 Prof. Pryle
Internship in Social Work 3 credits
(Prerequisite: permission of instructor) Supervised experiential learning designed to broaden the educational experience of students through practical experience and work assignments with governmental and/or community agencies in the field of social work. Supervision by a faculty member and agency supervisor. Limited to Juniors and Seniors.

Approved courses from other curricula:
Sociology majors may be advised to choose several courses taught in the Criminal Justice sequence; courses so approved include:

S/CJ 210 Law and Society
S/CJ 213 Criminology
S/CJ 214 Juvenile Delinquency
S/CJ 218 The American Court System
S/CJ 220 Penology: Corrections
S/CJ 221 Probation and Parole
S/CJ 224 Sociology of Deviance
S/CJ 225 White Collar Crime
S/CJ 227 Organized Crime Patterns
S/CJ 317 Trial, Jury and Counsel
S/CJ 324 Victimology

GERONTOLOGY COURSES

GERO 110 Staff
(S)Introduction to Gerontology 3 credits
A multi-disciplinary examination of the cognitive and affective aspects of the aging process. The course covers the social, physiological, psychological, economic, and health aspects of aging, as well as service-delivery systems. It explores planning and action strategies aimed at enhancing the quality of life and providing more adequate benefits and services for the older adult.

GERO 112 Prof. Naughton, Dr. Wolfer
Social Problems of Aging 3 credits
This course is devoted to a study of the specific problems of the aged in American society, with particular attention at both individual and societal levels to issues of age, inequality in opportunities and rewards; of mental health, housing, minorities, and institutions; of crime and fear of victimization; of economic status, work, leisure, and retirement; of attractiveness, aging and sexuality; of drugs, doctors, nursing homes and hospitals.

GERO 210 Dr. Yamanouchi-Rynn
Aging Around the World 3 credits
A cross-cultural approach looking at the ways in which a variety of societies deal with aging and the aged. The issues of work, economics, other types of expertise and different definitions of the aged are analyzed.

GERO 212 Dr. Wolfer
Aging and the Life Cycle 3 credits
Rites of passage, age norms, and role rehearsals for life transitions; the life cycle in comparative cultures; sociological dimensions of adulthood and aging concerning the work cycle, sport and leisure development, patterns of consumer behavior and life style, and the family cycle.

GERO 214 Prof. Borsuk
Aging and Human Behavior 3 credits
A critical examination of life satisfaction in old age; the social and psychological factors which affect it; factors contributing to the psychological well-being of older adults as a function of their position in the social system.

GERO 216 Prof. Pryle
Aging and the Community 3 credits
Consideration of selected community strategies effecting desired changes in the development and implementation of social services and programs for the elderly: legislative action, interagency relationships, the citizen role.

GERO 218 Prof. Borsuk, Prof. Pryle
Health and Aging 3 credits
An explorative study of the mental and physical health problems prevalent in the older adult population, with emphasis upon the preventive aspect of health-care as applied by themselves and health-care providers. Health-care approaches appropriate to the various problems, and relevant resources within the home and community are considered.

GERO 220 Prof. Cimini
Crime and Aging 3 credits
A consideration of crime as it affects aging; examining the older adult as victim, offender, practitioner, and perpetrator, in light of current thought, policy, and law.

GERO 230 Prof. Pryle
Social Policy and Aging 3 credits
Review of major legislation affecting older adults, including the Social Security Act, Older Americans Act, Medicare, and various local, state, and national programs for the aged.

GERO 232 Prof. Naughton
Aging and Death 3 credits
This course offers the student an opportunity to explore the mystery and meaning of death. Focus is on a number of aspects of dying and the death process, such as the dying individual and the family; cross-cultural perspectives; terminal illness; professions and death; rites and rituals.

GERO 284 Staff
Special Topics in Gerontology
(Prerequisite: permission of the chairperson and the instructor) Courses designed to meet specific needs of individual students or courses offered on a trial basis to determine the value of placing them into the regular curriculum.

GERO 382-383 Staff
Independent Study 3 credits
in Gerontology
Designed for advanced students who are capable of independent study. A program of planned research in gerontology under the guidance of a faculty member. Registration upon approval of the chairperson of the department and the instructor directing the study.

GERO 480-481 Prof. Pryle
Internship in Gerontology 3 credits
(Prerequisite: permission of instructor) Supervised experiential learning in one or more organizations that serve older adults. Supervision by a faculty member and agency supervision required. Limited to Juniors and Seniors.

THEOLOGY AND RELIGIOUS STUDIES

DR. E SPRINGS STEELE, Chairperson

The religious dimension of human life is of such importance that it is necessary to explore it in a liberal-arts curriculum.

The General Education requirement for all students at the University demands six credit-hours in Theology, a requirement that is fulfilled by T/RS 121-122, a two-semester introductory sequence. These courses must be completed before students take upper-division courses in Theology. Additionally, students must take another three credits in either Philosophy or Theology/Religious Studies to complete the GE Philosophy/Theology requirements. In addition to courses with a primarily Christian focus, the department also offers courses which deal with non-Christian religious traditions, among which are T/RS 314 (The Religions of the World) and T/RS 333 (The Jewish Way of Life).

The Bachelor of Arts degree in Theology/Religious Studies requires 30 credits in the major including the introductory courses required of all students. To ensure a well-rounded background in the discipline, each major must take at least one course in each of the categories listed below. Theology majors must also take at least one semester of T/RS 490. Each major is expected to confer with the departmental chairperson for the selection and balancing of courses. The department also offers a double-major program compatible with most other majors.

Departmental courses are grouped into the following categories.

Old Testament
New Testament
Systematic Theology
Historical Theology
Moral Theology

MINOR: The minor in Theology/Religious Studies requires 18 credits: T/RS 121 and 122 plus four more courses. In choosing courses for a minor, students may concentrate in one area of theology (e.g., moral theology, historical theology, biblical studies) or they may select courses from several areas of theological inquiry.

T/RS 121 Staff
(P)Theology I: Introduction to the Bible 3 credits

A survey of central texts and themes of the Bible. Its purpose is to develop biblical literacy as well as skills in interpreting various literary forms and key theological concepts.

T/RS 122 Staff
(P)Theology II: Introduction to Christian Theology 3 credits

(Prerequisite: T/RS 121) A survey of key Christian themes: creation, Christ's incarnation and redemption, the Church and sacraments, Christian personhood, and the practice of prayer, virtue, and hope for the future.

T/RS 184C Dr. S. Mathews
(P,W)Inside the Catholic Tradition 3 credits

This introduction to Catholic tradition will study its scope, depth, and on-going development, reception, and characteristics. Topics covered include faith and revelation, the intercommunion of scripture and tradition, the role of the Magisterium and the development of doctrine. Selected readings are taken from important conciliar texts and theologians.

T/RS 204 Staff
(P)Pauline Letters 3 credits

An introduction to the writings of the Apostle Paul, exploring Jewish and Greco-Roman influences on his letters as well as his contribution to basic Christian beliefs and practices.

THEOLOGY/RELIGIOUS STUDIES

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
MAJOR (GE T/RS)	T/RS 121-122	Theology I-Theology II	3	3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE PHIL	PHIL 120	Introduction to Philosophy	3	
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE QUAN	MATH ELECT	Quantitative Reasoning Elective		3
GE S/BH	S/BH ELECT	Social/Behavioral Elective		3
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			16	**16**
		SECOND YEAR		
MAJOR	T/RS ELECT	Theology Electives	3	3
COGNATE	ELECT	Electives	3	
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE S/BH	S/BH ELECT	Social/Behavioral Elective		3
GE PHIL	PHIL 210 - ELECT	Ethics-Phil. Electives	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
		THIRD YEAR		
MAJOR	T/RS ELECT	Theology Electives	3	6
COGNATE	ELECT	Electives	9	9
GE ELECT	ELECT	Electives	3	3
			15	**18**
		FOURTH YEAR		
MAJOR	T/RS 490	Topics in Theological Investigation		3
MAJOR	T/RS ELECT	Electives	6	
COGNATE	ELECT	Electives	9	9
GE FREE	ELECT	Electives	3	3
			18	**15**

Total: 130 CREDITS

T/RS 206 Staff
The Four Gospels 3 credits
A study of the four Gospels from the perspectives of history, theology and literature.

T/RS 207 Dr. Shapiro
(P, D)Jews, Christians, and the Bible 3 credits
A survey of ancient and modern ways of reading the Bible. The focus will be on a group of central biblical figures whose stories will be examined in the context of ancient Israelite history and society. The biblical stories will then be compared with later elaborations by Jewish and Christian interpreters.

T/RS 208 Staff
(P,W)Faith and Justice in the Prophetic Tradition 3 credits
The goals of contemporary Jesuit education are the service of faith and the promotion of justice. This course will examine the roots of these ideals in the writings of the OT prophets, with special attention to Isaiah.

T/RS 210 Staff
(P,W) The History of Christian Theology 3 credits
A study of the vital growth of Christianity's life, doctrine, worship and spirituality over the centuries. Special emphasis will be placed on principal leaders, thinkers and heroes.

T/RS 211 Dr. Benestad
Great Books I: Perspectives on Western Culture 3 credits
The religious, philosophical and political writings of major thinkers of the Western tradition. The first semester includes the study of the Bible, Aristotle's Ethics, Plato's Apology, Augustine's City of God, and the thought of Aquinas. Emphasis is on the study of these works as they illuminate the current world.

T/RS 212 Fr. Sable, S.J.
Saints and Holiness 3 credits
An inquiry into the nature of Christian sanctity by an examination of the lives and accomplishments of traditional saints and of contemporary persons who respond to the Gospel message.

T/RS 213 Fr. Sable, S.J.
American Catholic Thought 3 credits
The major themes of American Catholic tradition from colonial times to the present are placed in their historical, religious, social and political context.

T/RS 215 Staff
(P)Early Christian Writers 3 credits
This course is designed to provide an introduction to the main figures, theological currents and ideas of the formative period of the history of Christian theology by a close reading of selected texts from the major authors of the first six centuries of the Church.

T/RS 217 Dr. Shapiro
(P, D)The Holocaust in Context: History and Theology 3 credits
An exploration of the Holocaust through the perspective of the history of anti-Semitism. The course will examine the historical aspects of the Holocaust as well as the moral and theological issues raised by it.

T/RS 218 Dr. Johnson
(P)Development of Christian Thought to 1100 3 credits
A survey of the principal theological, spiritual and institutional developments in the first millennium of the Church's life.

T/RS 219 Dr. Johnson
(P)Development of Christian Thought 1100 to 1800 3 credits
Survey of the principal theological, spiritual, and institutional developments in the Church in the medieval, reformation, and early modern periods.

T/RS 220 Fr. Begley, S.J.
(P)Spirituality: Liturgy and Sacraments 3 credits
A basic course in sacraments which will explore the human religious experience of the faith community and its expression in sacramental celebration. Two features of the Rite of Christian Initiation of Adults, its process-orientation and the role of the community, will serve as basis for the examination of new sacramental models. Throughout the course, specific attention will be given to the development of a sacramental spirituality.

T/RS 221 Dr. Steele
Prayer 3 credits
Introduction to the nature, purpose, and method of prayer in the Catholic Christian tradition.

T/RS 222 Fr. Liberatore
(P)Introduction to Liturgical Theology 3 credits
This course will consider the relationship between liturgy and theology, as realities in the Christian life which form and inform one another. Fundamental documents of the Roman liturgy will be introduced, with an eye toward discerning insights into God, Christ, the Church, the sacraments and the human person which are embodied therein.

T/RS 223 Dr. Johnson
(P,W)Heaven and Hell 3 credits
Besides studying the origins of the Christian belief in the afterlife, the course will also focus on Catholic and Protestant formulations of the doctrines of salvation and damnation as well as literary responses to the notions of heaven and hell.

T/RS 224 Staff
(P)Theology of the Person 3 credits
A study of the religious dimensions of personal existence that correlates Christian tradition and contemporary experience. The course develops the topics of identity, self-understanding, creatureliness, sin and the influence of gender on a theological interpretation of personhood.

T/RS 225 Fr. Sable, S.J.
Introduction to the Theology of the Byzantine Churches 3 credits
The Byzantine theological tradition develops special emphases within the mainstream of the Christian tradition. This course introduces the student to the study of some of the specifically Byzantine contributions to the understanding of the Christian mystery, with particular emphasis on early developments.

T/RS 226 Fr. Sable, S.J.
(P)Introduction to Eastern Liturgies 3 credits
A survey of the Eastern Eucharistic Liturgies with particular emphasis on the structure, history, and liturgical theology of the Byzantine Liturgy of St. John Chrysostom.

T/RS 227 Staff
(P)Christ in Tradition and Culture 3 credits
Examines the meaning and message of Jesus Christ as understood and communicated in the faith of his followers with special consideration given to the symbolic dimensions and cultural aspects of that Christian understanding.

T/RS 228 Dr. Bader-Saye
Protestant Traditions 3 credits
An exploration of the Reformation vision of theology covering the roots and principles of Protestant ways of dealing with such topics as the nature of the Church, redemption, ethics, God, and Jesus.

T/RS 229 Dr. Pinches
Modern Protestant Thought 3 credits
This course will survey the past two centuries of Protestant thought with an emphasis on the theological roots of contemporary Protestant Liberalism and Evangelicalism. Other current debates among Protestants today and their ecumenical discussions with Catholics will also be presented.

T/RS 230 Msgr. Bohr, Staff
Moral Theology 3 credits
A study of the Christian moral tradition, its history and principles. Among areas to be treated are: the family, sexual activity and human rights.

T/RS 231 Drs. Benestad, Pinches
(P) Social Ethics 3 credits
This course will prepare students to recognize ethical dimensions of political, economic and social issues through the study of the following: pertinent writings of Pope Paul VI and Pope John Paul II, a classic work of political theory, and several contemporary writings on such issues as morality, foreign policy and economic justice.

T/RS 232 Dr. Benestad
John Paul II and Catholic Social Thought 3 credits
This course will explore the dialogue between the Catholic Church and modern ideologies on social and political matters. Readings include pertinent documents of the Second Vatican Council and recent papal writings, especially those of Pope John Paul II.

T/RS 233 Dr. Bader-Saye
(P,W)Suffering 3 credits
This course examines the way in which Christians and Jews narrate their suffering in the context of God's purposes. Traditional formulations of "the problem of evil" will be critiqued, and the concept of redemptive suffering will be explored.

T/RS 234 Sr. Foley, C.N.D.
(P, D)Twentieth-Century Peacemakers 3 credits
A study of some of the principles and methods of "waging peace" found in the lives and writings of Mohandas Ghandi, Dorothy Day, Thomas Merton and Martin Luther King.

T/RS 235 Dr. Pinches
(P)The Theology of Birth and Death 3 credits
This course will investigate the meaning and significance of the birth and death of human beings in the Christian tradition. Related topics will be: suicide, euthanasia, capital punishment, contraception and abortion.

T/RS 236 Prof. Casey,
(P,W)Prophets and Profits: The Economy in the Christian Life Dr. Bader-Saye
3 credits

An inquiry into the witness of the Church with regard to questions of wealth, business, economics and formulation of public policy. Biblical sources, Church tradition, and contemporary narratives will be employed to assess the common good.

T/RS 237 Prof. Casey
Politics: A Christian Perspective 3 credits

An inquiry into the role of the state, the Church and the individual in political life. Special attention is given to the problem of violence; the course is set in the unique American perspective of Church-State relations.

T/RS 238 Dr. Benestad
Nietzsche and Christianity 3 credits

A focus on Nietzsche's relation to and critique of Western thought in general and Christian thought in particular. Nietzsche's deep influence on contemporary theology and philosophy will be shown through extended readings from his collected works.

T/RS 239 Staff
Theology for the Twentieth Century 3 credits

An introduction to the problems and methods of studying theology today. This course will begin with an overview of some of the main themes of twentieth-century theological thought, and will then move on to a study of one of the century's leading Catholic theologians: Karl Rahner. Emphasis will be placed on the integration of a plurality of philosophical approaches with the theological tradition and with questions of the present day.

T/RS 240 Staff
(P)A Theology of Marriage 3 credits

This course will introduce students to the theology of marriage. It will focus on the distinctiveness of Christian marriage, its sacramentality, marriage as a vocation and covenant, love and friendship in marriage, sex, singleness, family and children. Questions of the state of the institution of marriage in contemporary culture will also be discussed.

T/RS 296 Dr. S. Mathews
(P, D) Life Along The Dead Sea 3 credits

A three component travel course: (1) Participation in a one-week archaeological excavation at Ein Gedi, Israel; (2) A one-week tour of important biblical sites; and (3) a U of S-based series of lectures for background and context.

T/RS 303 Dr. Frein
Jesus for the Gentiles: An Introduction to the Gospel of Luke 3 credits

The primary purpose of this course is a close reading of the Third Gospel. Although the primary focus will be on the text rather than on methods of analysis, appropriate attention will be paid to literary forms, historical background and responsible interpretation.

T/RS 304 Dr. S. Mathews
John's Gospel and Letters 3 credits

A close look at the Fourth Gospel and the Epistles of John with an emphasis on their literary, historical, and theological characteristics.

T/RS 305 Dr. S. Mathews
(P)The Apocalypse of St. John 3 credits

This introduction to the last book of the Bible will emphasize the literary forms and thought patterns of apocalyptic literature as well as the historical and theological character of the book itself, highlighting both textual interpretation and contemporary relevance.

T/RS 306 Dr. S. Mathews
Job and the Psalter 3 credits

A close look at the wisdom literature of the Old Testament. The study of both the Book of Psalms and the Book of Job will emphasize theological themes.

T/RS 307 Drs. S. Mathews, Frein
Passion and Resurrection Narratives 3 credits

A study of the theology of each of the Gospels by an analysis of the key narratives of the Passion and Resurrection in the four Gospels.

T/RS 308 Dr. S. Mathews
(P)The Great Prophets 3 credits
An examination of the four major prophets of the Old Testament: Isaiah, Jeremiah, Ezekiel and Daniel, with an emphasis on the study of selected texts.

T/RS 309 Dr. S. Mathews
(P)The Heart of the Old Testament 3 credits
An in-depth look at the five books of Moses (Genesis, Exodus, Leviticus, Numbers and Deuteronomy) using ancient and modern exegetical views to examine and emphasize the central theme of the Covenant.

T/RS 310 Staff
(P)Religion and the American People 3 credits
An exploration of the great religious developments, persons, and questions in the life of the American people from the beginnings to the present day.

T/RS 311 Staff
Liturgical Theology of Byzantine Churches 3 credits
A survey of the various elements of the liturgical life of the Byzantine tradition, examining the way that tradition is shaped and expresses itself as well as the underlying influences of faith upon that formation and practice.

T/RS 312 Fr. Sable, S.J.
Jesuit Spirit 3 credits
The Society of Jesus (Jesuits): its spirituality, tradition and history from their sixteenth-century origins in the Spiritual Exercises of St. Ignatius of Loyola through the contemporary period, with special emphasis on Jesuit theological and cultural contributions to the Church.

T/RS 313 Dr. Pinches
(P)Faith and Healing: God and Contemporary Medicine 3 credits
This course will consider the history of Western medicine in the light of a range of Christian notions such as that life is a gift from God, that the body is good, that illness is a (limited) evil, that health is a responsibility. In this light, the idea that medicine is a calling and healing an art will be considered.

T/RS 314 Staff
(P, D)The Religions of the World 3 credits
An exploration of belief in the traditions of the classical historical religions of the world through both systematic analysis and the reading of sacred texts.

T/RS 315 Staff
(P, D)Women in Christianity 3 credits
An exploration of some of the major roles women have played in Christian thought and experience, including their contributions as disciples, spiritual guides, and social critics. Will also examine assumptions about male and female identities and consider challenges to traditional roles.

T/RS 316 Sr. Foley, C.N.D.
(P,W)God and the Earth 3 credits
This course will explore the way human beings relate to the land and to other life forms and how this relationship is affected by belief in God. Biblical and other theological texts from Christianity and other religious traditions will be considered.

T/RS 318 Sr. Foley, C.N.D.
Models of the Church 3 credits
A brief survey of various expressions of the Church's nature and mission throughout its history, from the New Testament through Vatican II. Exploration of some contemporary approaches, including liberation and feminist theology, and such questions as: What and who is the "true Church"? Where is it located? What is the place of Mary in the life of the Church?

T/RS 319 Staff
(P, D)Women's Spiritual/ Autobiographical Writing 3 credits
(Prerequisite: permission of instructor) This course explores women's written expressions of their spiritual lives. Readings, which include spiritual autobiographies and other writings, both classic and contemporary, focus on women's experience and understanding of the divine-human relationship. Seminar format; limited to 18 students.

T/RS 321 Staff
(P)Friendship and the Christian Life 3 credits
This course will explore friendship as a central practice of the Christian life, especially the moral and spiritual life, and examine virtues such as fidelity, forgiveness, and love which are essential for sustaining and nurturing friendships.

T/RS 322 Staff
(P)Approaches to God 3 credits
A study of some of the ways religious thinkers have approached the topic of God. Will include consideration of biblical, classical, and contemporary ways of understanding God as well as a selection of artistic, cultural, and imaginative perspectives on God.

T/RS 323 Fr. Liberatore
(P)Signs and Symbols 3 credits
An introduction to the symbolic character of human existence in general, and of the sacramental life of the Church in particular. Beginning with a consideration of the students' own experience of the symbolic character of their existence, the first part of the course will examine leading theories of why symbols are needed and how they work. Utilizing a definition of Catholic sacraments which focuses on their essentially symbolic nature, the course will then undertake a study of why sacraments are needed and how they work.

T/RS 324 Dr. Benestad
Spiritual Classics 3 credits
A study of the autobiographies of St. Augustine and St. Teresa of Avila *(The Confessions and Life of Teresa of Jesus).* As an introduction to the study of the spiritual life, John Paul II's "Sign of Contradiction" is read.

T/RS 325 Fr. Levko, S.J.
Eastern Christian Spirituality 3 credits
A study of the meaning of the spiritual life for Eastern Christian writers with a particular emphasis upon Sts. Athanasius, Gregory of Nyssa and Gregory Palamas. Themes such as prayer, image of and likeness with God, discernment of spirits, hesychasm and icons will be discussed.

T/RS 326 Prof. Casey
(P, D,W)The Church and Contemporary Social Issues 3 credits
Explores the religious and ethical dimensions of social issues such as prejudice and violence. The findings of related social sciences and literature are placed in the context of Christian anthropology to give the student a concrete view of their interrelationship.

T/RS 327 Prof. Casey
Belief and Unbelief 3 credits
A multidisciplinary inquiry into the nature of Faith in the Catholic tradition with special attention to the challenges of modernity.

T/RS 328 Dr. Frein
(P)Wealth and Poverty in the Biblical Tradition 3 credits
A study of the presentation of various economic issues in the Old and New Testaments, including wealth and poverty as signs of God's favor, as creating obligations to care for and protect the poor and as involving both rights and responsibilities.

(P) T/RS 330 Drs. Benestad, Pinches
Biomedical Ethics 3 credits
This course will present theological reflections on the two main ethical theories undergirding contemporary biomedical ethics. It will also present and discuss relevant philosophical and theological arguments on such issues as abortion, care of handicapped infants, euthanasia, suicide, and the profession of medicine.

T/RS 331 Drs. Benestad, Pinches,
(P)Christian Ethics Bader-Saye
3 credits

This course will discuss the practice of the Christian moral life in contemporary society. The Christian virtues will be distinguished and related to selected problems arising in our lives as private individuals, as members of families, as professionals, and as citizens. Other topics to be treated include: evil, sin, Christian liberty, Christian perfection, relativism and humanism.

T/RS 332 Dr. Pinches
Christian Ethics in America 3 credits

An exploration of the discussion of American theologians, since 1900, of the moral, social, and political implications of Christianity, including such concerns as the relation between the Christian Church and the nation-state and the status of America as a Christian nation.

T/RS 333 Dr. Shapiro
(P, D,W)The Jewish Way of Life 3 credits

As a global introduction to Judaism this course will examine: essential beliefs, holidays and life ceremonies, Jewish history and modern Judaism, especially the Holocaust, the State of Israel and the Coming to America.

T/RS 334 Dr. Shapiro
(P)Jewish and Christian Approaches to Ethics 3 credits

A survey of Jewish and Christian approaches to ethics and ethical problems. This course will examine the biblical and religious foundations of both Jewish and Christian ethics, ethics as a human construct and ethical case studies. Students who take T/RS 337 may not take T/RS 334.

T/RS 335 Dr. Shapiro
(P, D,W)Judaism in the Time of Jesus 3 credits

A study of first-century Jewish religious sects as well as the cultural, political, and historical setting of the Roman Empire in which Jesus lived and preached and where monotheism continued to develop.

T/RS 336 Staff
(P)Contemporary Case Studies in Theology 3 credits

This course attempts to develop Christian insights into a series of specific moral dilemmas or cases through continued class discussion.

T/RS 337 Dr. Shapiro
(P, D,W)Jewish Approaches to Ethics 3 credits

A survey of Jewish approaches to ethics and ethical problems with comparisons to other religious traditions and the writings of secular ethicists. Students who take T/RS 334 may not take T/RS 337.

T/RS 338 Dr. Pinches
Jesus and the Moral Life 3 credits

A study of how the life of Jesus and the theological claims Christians make about his person relate to the moral life. Historical resources of the first century will be considered as well as contemporary writings in Christian ethics.

T/RS 339 Staff
(P)An Exploration of Catholic Identity 3 credits

This course focuses on certain characteristic features of the Catholic experience of Christianity. It is ecumenically sensitive to other Christian Churches and the common core of beliefs shared by all while at the same time trying to examine what is distinctive about being Catholic. It does so by exploring a number of key themes in Catholic tradition, history and life. It should be of interest not merely to Catholic students but to others who have wanted to be better informed about their Catholic friends and even the mission of The University of Scranton, in an irenic, non-polemical context.

T/RS 400 Dr.Frein
Introduction to 3 credits
Old Testament
An introduction to the primary methods and problems of Old Testament interpretation: its historical background, the theological analysis and synthesis of major sections, as well as the use of source, form, and redaction criticism and such more recently developed approaches as social, scientific, literary, and feminist criticism.

T/RS 439 Dr. Steele
(P, D,W)Psychology 3 credits
and Spirituality
(Prerequisite: PSYC 110) This course explores selected Christian and Buddhist traditions of spirituality as understood by their practitioners and from the perspective of representative theorists or schools of Western psychology. The course concludes by assessing positive and negative aspects of these psychological approaches to understanding and evaluating spiritual experience.

T/RS 480 Staff
Internship in Theology/ 1-3 credits
Religious Studies
(Prerequisite: Junior standing, 15 credits of Theology/Religious Studies) Theology majors and minors can receive credits for a variety of ministerial experiences. Approval must be obtained beforehand from supervising faculty member and chairperson. Internship credits can be placed in the cognate or free area; they do not count toward the 30 credits needed for a Theology major or the 18 credits needed for a Theology minor.

T/RS 490 Staff
Topics in Theological 3 credits
Investigation
(Prerequisite:12 credits of Theology/Religious Studies). A capstone seminar required for Theology majors, recommended for minors and available to other qualified students with permission of instructor. Topics will vary from semester to semester depending on student interest and faculty expertise. The use of primary sources and research appropriate to the specific topic will be emphasized. Students may take more than one semester of this course.

INTERDISCIPLINARY COURSES *

INTD 100
Freshman Seminar 1 credit
Freshman seminars, whether linked to specific majors or to a student's general field of study (business, humanities, natural science, social science or health science), are designed to foster students' successful integration into academic and community life at The University of Scranton. Seminars, which offer freshmen an opportunity to work individually and in small groups with their faculty and fellow students, provide a focussed and individualized way to create an effective approach to university life so that each student's potential is realized and each student's goals for achievement are met. Individual seminars will focus both on the topics necessary to all students engaged in study at The University of Scranton and on particular topics applicable to a student's major or field of interest. Topics common to all freshman seminars include: the nature and purpose of higher education; time management; the character and mission of a Jesuit university; academic-development strategies; the role of the faculty; University resources; personal values. Other topics will vary by department or unit offering the seminar and be tailored to meet the common interests of the students and the instructors.

INTD 103 Staff
(D)The Vietnam Experience 3 credits
The historical origins of the Vietnam War, including the period of French colonialism and the American intervention; the politics, economics, and military strategy in Vietnam during the war years and today; present relations with China and the USSR. Why were we there and why did we fail?

INTD 105 Drs. Homer, McInerney
Great Lives: Images on Stage 3 credits
An examination of the often contrasting impressions of historical personalities, as they are portrayed in plays and films and as they appear to historians. Historical figures to be considered include Caesar, Richard III, Thomas More, Lincoln and Churchill.

INTD 108 Staff
Health & Legal Implications of Chemical/Drug Abuse 3 credits
A team-taught course that deals with the neurophysical, health, and legal implications of alcohol/drug abuse, viz: its biochemical effects and aspects, its legal and social consequences, and its health and lifestyle implications.

INTD 209 Profs. Schaffer, Homer, Dunn,
(D)The Holocaust Rowe, and Friedrichs 3 credits
An exploration of the cataclysmic event in Jewish history known as the Holocaust. The course will examine the subject from the perspective of various academic disciplines – historical, sociological, philosophical, artistic, and literary, among others – and will include a field trip to the Holocaust Museum in Washington, D.C.

INTD 211 Drs. Harrington, Sulzinski
(D, E)HIV/AIDS: Biological, Social and Cultural Issues 3 credits
(Prerequisite: C/IL 102 or equivalent)
Study of the biology of HIV and AIDS, including fundamentals of infectious disease, immunology, and virology. The impact of the epidemic is examined in relation to the differing experiences of various social groups and countries. The epidemiology of the disease and the response of health-care systems and governments are explored. Opportunity for American Red Cross certification in basic HIV facts and eligibility for HIV Instructor certification will be included as part of the course. Open to all majors.

INTD 224 Dr. Dutko
(Q, W)Science, 3 credits
Decision-Making and Uncertainty
A study of decision-making as it relates to scientific and public policy matters. The course covers philosophical, mathematical and psychological aspects of decision-making in the face of uncertain evidence. Topics include the nature of scientific evidence; probabilistic evidence and the law; uncertainty and medicine; and other issues such as nuclear power, waste disposal, and strategic nuclear planning. Reading taken from contemporary sources.

INTD 333 Drs. Dunn, Mathews
The Bible in Image and Text 3 credits
This team-taught course is a study of the interpretation of major biblical stories and figures in the Christian theological tradition and in art history. The marriage of Christian text and image is a natural and long-lived one; it provides an exciting way to integrate knowledge of various major themes such as creation and last judgement, and of many great biblical figures, such as Moses and Christ. Students will learn to read the images and visualize the text.

NSCI 102 Dr. Baril, Prof. S. Casey
Science and Society 3 credits
This course attempts to show how the sciences, particularly the behavioral sciences, impact both positively and negatively on society. Issues dealt with include the nature of science, similarities and differences between the scientific disciplines, the impact of science on the concept of free will, and the philosophical and moral implications of psychological testing, socio-biology, and Skinnerian radical behaviorism.

NSCI 201 Dr. Carey
(E)Science and the 3 credits
Human Environment A brief study of the effects of technological, scientific and industrial progress on the air, land, and water resources of the human environment. Problems in each of the resource areas will be discussed in detail.

*Interdisciplinary courses are team-taught courses which vary from semester to semester. They may be used to fulfill appropriate General Education requirements as specified in the course-schedule bulletin.

The Kania School of Management

The vision of The Kania School of Management is to prepare students to make lasting contributions to their organizations and communities.

Accreditation

The Kania School of Management is accredited by The Association to Advance Collegiate Schools of Business (AACSB International) on both the undergraduate and graduate levels.

MISSION STATEMENT

The Mission of The Kania School of Management is to contribute to a Jesuit, liberal arts education by preparing students to meet the educational requirements for success in leadership, management, team membership, and other productive roles in business and related fields, and to provide service to the broad University community. The Kania School of Management provides for the development of knowledge, skills, interpersonal and communication capabilities, attitudes and values that will enable students to assume positive, influential roles in their work organizations and society. This process integrates the foundation for lifelong learning and decision making with a clear sense of ethical responsibilities and a sensitivity to cultural and demographic diversity. Our mission supports the University's Statement of Mission - to provide professional and pre-professional programs "designed to meet the standard of the appropriate professional fields, and to develop students who have a clear sense of the ethical responsibilities which these fields demand of their successful practitioners."

DEPARTMENTAL PROGRAMS

Ten programs are available in the Kania School of Management: Accounting-Track in Financial Accounting, Accounting-Track in Managerial Accounting, Accounting Information Systems, Electronic Commerce, Enterprise Management Technology, Finance, International Business, Management, Marketing, and Operations Management. In addition, a B.S. in Economics is jointly offered with the College of Arts and Sciences. These programs prepare the student for a career in business or for graduate study. In addition to the requirements of the major and the business core, students in The Kania School of Management will complete the same general education core as students in the other undergraduate colleges. At least 50 percent of the major and business core credits must be earned at The University of Scranton. Apart from minor exceptions, which require the explicit approval of the dean of the school, the student will spend the senior year in residence at the University.

The Kania School of Management is a member of the SAP University Alliance. This program enhances the value of the curriculum by placing the latest information technology in the classroom to give the next generation of business leaders a real-world advantage. The school has a fully operational SAP R/3 system for instructional use. Members of the faculty have been specifically trained by SAP America and are integrating Enterprise Resource Planning systems in appropriate classes.

GRADUATION REQUIREMENTS

In order to graduate in a business major, in addition to the 2.00 minimum grade-point average (GPA) overall, the student must have earned a minimum 2.00 GPA in both the major and business core coursework.

MINORS

A minor in General Business is available to non-business students with the exception of students majoring in Chemistry-Business, Electronics-Business and Economics (SOM only). It will consist of 21 credits:

1. ECO 101- Current Economic Issues
2. ACC 253 - Financial Accounting
3. ECO 351 - Environment of Intl. Business
4. FIN 351 - Introduction to Finance
5. MGT 351 - Principles of Management
6. MKT 351 - Introduction to Marketing
7. OIM 471 - Business Information Management

The last five must be taken after the other courses, and may be taken no earlier than the junior year. Minors in Accounting, Economics, Electronic Commerce, Finance,

Management of People and Teams, Management of Structures and Systems, and Operations Management are described under those respective programs.

BUSINESS COGNATE

Non-Business students with special needs may pursue a personal cognate in Business, but may not take more than 25 percent of their total credit hours in Business. With the approval of his or her advisor, the student is free to select a variable number of Business courses. However, the prerequisites stated in the catalog must be observed, and upper-division courses may not be taken before the junior year.

MATH OPTIONS

Two math options are available to Business majors:

Option I* (six credits)	Option II* (eight credits)
MATH 107 (Quantitative Methods II)	MATH 114 (Analysis I)
MATH 108 (Quantitative Methods III)	MATH 221 (Analysis II)

Both options cover the topics of calculus. Option I takes an applied approach; Option II a theoretical approach.

*Students are tested for math placement during summer orientation. On the basis of these tests and their high school background it will be recommended that some students take Option II, especially if they expect to pursue graduate studies. The majority of students will be placed in Option I, and may also be required to take MATH 106 (Quantitative Methods I) as a prerequisite to taking MATH 107.

THE BUSINESS LEADERSHIP PROGRAM

DR. ROBERT L. McKEAGE, Director

See page 363.

ACCOUNTING

DR. MICHAEL MENSAH, Chairperson

Accounting plays a vital role in the business and investment decisions made by the management, owners and creditors of organizations. Because of this important role, accounting has become known as the "language of business." To fulfill the needs of students entering this discipline, the Accounting Department of The University of Scranton offers majors in two tracks: Financial Accounting and Managerial Accounting. In addition, a combined Bachelor of Science/Master of Business Administration Degree program is available for students interested in professional certification in states requiring 150 credit hours of education. The department's undergraduate degree program in Accounting Information Systems is described separately in this catalog.

Financial Accounting focuses on the needs of users outside of the organization, primarily investors and creditors. This accounting information facilitates the investment and credit decisions that are inherent in a market economy. The financial track is best suited for those students aspiring to become Certified Public Accountants (CPAs). While licensure of CPAs is separately governed by each state's legislative body, the Accounting Department provides students with opportunities to satisfy the education requirements of any state in which they may aspire to become certified. (Please refer to the combined B.S./M.B.A. degree program below.)

Managerial Accounting focuses on the information needs of users within the organization. This information aids in planning and controlling the organization's activities, and in evaluating the performance of the organization's segments and managers. The managerial accounting track is best suited for those students aspiring to become Certified Management Accountants (CMAs).

The success of our graduates is demonstrated by their job placements. Alumni are employed by Big Five, regional, and local public accounting firms, by many notable firms in private industry, as well as by governmental and not-for-profit organizations. Qualified students have opportunities for on-the-job training through our internship program.

Combined Bachelor of Science/Master of Business Administration Degree Program

The Accounting Department of The University of Scranton offers interested and qualified students the opportunity to earn both a Bachelor of Science degree in accounting and a Master of Business Administration degree with an accounting specialization. While this program may benefit any student interested in the accounting discipline, the program was developed in response to the adoption by most states of a 150-credit-hour educational requirement to become a Certified Public Accountant. With judicious course scheduling, most students can complete the program within five academic years.

Students interested in this BS/MBA degree program should apply to The Graduate School as prescribed by The Graduate School Catalog as early as December of their junior year at The University of Scranton. Criteria for acceptance into the combined program include the student's previous academic performance, GMAT score, letters of recommendation and statement of purpose. Students admitted into this combined BS/MBA degree program may elect to follow either the Financial Accounting track, the Managerial Accounting track, or the Accounting Information Systems major. Students must adhere to The Graduate School Catalog requirements.

Minor in Accounting

The Accounting minor provides students of any major with an understanding of the language of business, thus serving to expand their career possibilities. The minor also

serves as an excellent foundation for students who might later pursue a graduate business degree or law degree. The minor consists of four required courses (ACC 251-252 or ACC 253-254, ACC 361 and ACC 363), plus two elective courses (any 300 or 400 level accounting courses). Therefore, business students (and other students who are required to take two semesters of sophomore-level accounting) can complete the minor by taking four additional accounting courses beyond the two accounting courses that are required of their major. Other students can complete the minor by taking no more than six accounting courses. Interested students should contact their advisor in the KSOM Advising Center.

ACCOUNTING-FINANCIAL ACCOUNTING TRACK

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
GE S/BH	ECO 153-154	Prin. of Micro-Macro Economics	3	3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy	3	
GE PHIL-T/RS	T/RS 121	Theology I		3
GE C/IL	C/IL 104	Computing and Information Literacy		3
GE QUAN	MATH ELECT[1]	Math Option-2 courses	3-4	3-4
GE HUMN	HUMN ELECT [2]	Humanities Elective	3	
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar/Physical Education	1	1
			16-17	**16-17**
		SECOND YEAR		
BUS CORE	ACC 251-252	Financial Accounting I-II	3	3
BUS CORE	STAT 251-252	Statistics for Business I-II	3	3
BUS CORE	MGT 251	Legal Environment of Business		3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT[3]	Free Elective	3	
			18	**18**
		THIRD YEAR		
MAJOR	ACC 361-362	Intermediate Accounting I-II	3	3
MAJOR	ACC 363-364	Federal Taxes-Auditing	3	3
BUS CORE	MGT 351-352	Principles of Management I-II	3	3
BUS CORE	FIN 351-MKT 351	Intro. to Finance-Intro. to Marketing	3	3
BUS CORE	OIM 351-OIM 352	Intro. to Mgt. Science-Intro. to Oper Mgt.	3	3
BUS CORE	ECO/IB 351	Environment of Intl Business		3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
			18	**18**
		FOURTH YEAR		
MAJOR	ACC 460-ELECT[4]	Adv. Accounting-Major Elective	3	3
MAJOR	ACC 461-ELECT[4]	Cost Accounting-Major Elective	3	3
BUS CORE	OIM 471-MGT 455	Bus. Info. Mgt.-Bus. Policy & Strategy	3	3
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE ELECT	ELECT[2]	Free Electives	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**13**
			Total: 133-135 CREDITS	

[1] See note on Math Options on page 224.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

[4] Major electives for the Financial Accounting track are ACC 365, 470, 472, 473, 474, 475 and 480. Students who plan to sit for the CPA examination in New York or New Jersey need six credits of finance and six credits of law. For the additional course in finance, one of FIN 361, FIN 362, or FIN 475 is recommended. ACC 470 is recommended for the additional law course.

ACCOUNTING-MANAGERIAL ACCOUNTING TRACK

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
GE S/BH	ECO 153-154	Prin. of Micro-Macro Economics	3	3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	3	3
GE C/IL	C/IL 104	Computing and Information Literacy		3
GE QUAN	MATH ELECT[1]	Math Option-2 courses	3-4	3-4
GE HUMN	HUMN ELECT[2]	Humanities Elective	3	
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar/Physical Education	1	1
			16-17	**16-17**
		SECOND YEAR		
BUS CORE	ACC 251-252	Financial Accounting I-II	3	3
BUS CORE	STAT 251-252	Statistics for Business I-II	3	3
BUS CORE	MGT 251	Legal Environment of Business		3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT[3]	Free Elective	3	
			18	**18**
		THIRD YEAR		
MAJOR	ACC 361-362	Intermediate Accounting I-II	3	3
MAJOR	ACC 461-365	Cost Acctg.-Federal Tax of Corp.	3	3
BUS CORE	MGT 351-352	Principles of Management I-II	3	3
BUS CORE	FIN 351-MKT 351	Intro to Finance-Intro. to Marketing	3	3
BUS CORE	OIM 351-OIM 352	Intro. to Mgt. Science-Intro. to Oper. Mgt.	3	3
BUS CORE	ECO/IB 351	Environment of Intl. Business		3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
			18	**18**
		FOURTH YEAR		
MAJOR	ACC 462-ELECT[4]	Adv. Mgrl. Accounting-Major Elective	3	3
MAJOR	ACC ELECTIVES[4]	Major Electives	3	3
BUS CORE	OIM 471-MGT 455	Bus. Info. Mgt.-Bus. Policy & Strategy	3	3
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE ELECT	ELECT [2]	Free Electives	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**13**

Total: 133-135 CREDITS

[1] See note on Math Options on page 224.
[2] If EDUC. 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.
[3] If a third math course is required, it replaces this GE elective.
[4] The major electives for the Managerial Accounting track are ACC 363, 460, 470, 471, 472, 474, 475 and 480.

ACC 210 Staff
Survey of Managerial and Financial Accounting 3 credits
(Not open to students needing 6 credits in introductory accounting.)
A foundation course for ACC 502. Topics covered include recording transactions, adjusting and closing entries, and preparing financial statements; the form and content of each financial statement; and the principles underlying accounting treatment of economic events. Managerial accounting terminology, concepts and cost classification; the cost of goods manufactured and sold statement; and the budgeting process are also covered.

ACC 251 Staff
Financial Accounting I 3 credits
(For ACC and FIN majors) A survey of accounting principles, concepts and procedures. Topics covered include financial statements, the information-processing cycle, cash, receivables, inventory costing methods, plant and equipment, intangibles, and current liabilities.

ACC 252 Staff
Financial Accounting II 3 credits
(Continuation of ACC 251 for ACC and FIN majors; prerequisite: ACC 251) A study of long-term liabilities, owners' equity of corporations and partnerships, the cash-flow statement, and cost analysis and accumulation.

ACC 253 Staff
Financial Accounting 3 credits
(For non-accounting and non-finance majors) A survey of the accounting cycle, basic financial statements, theory and techniques of income, asset, and liability recognition.

ACC 254 Staff
Managerial Accounting 3 credits
(Continuation of ACC 253 for non-accounting and non-finance majors; prerequisite: ACC 253) This course examines accounting information primarily from the perspective of a user *within* the organization. Topics covered include cost allocation, product costing, budgeting, profit planning, and performance evaluation.

ACC 361 Drs. Carpenter, Mensah
Intermediate Accounting I 3 credits
(Prerequisite: junior standing, ACC 252) A comprehensive study of contemporary accounting theory, concepts and procedures and their application to the asset classifications on the balance sheet. Current pronouncements of the various accounting organizations relevant to assets will be emphasized.

ACC 362 Drs. Carpenter, Mensah
Intermediate Accounting II 3 credits
(Prerequisite: ACC 361) Application of contemporary accounting theory to liabilities and stockholder's equity classifications of the balance sheet. Current pronouncements of accounting organizations relevant to liabilities and owners' equity accounts will be emphasized.

ACC 363 Dr. Linton, Staff
Federal Taxes 3 credits
(Prerequisites: junior standing, ACC 252 or 254) An introductory course covering pertinent phases of federal income taxation. Emphasis on business transactions, preparation of individual returns, and finding the answers to federal tax questions.

ACC 364 Dr. Ellis, Staff
Auditing Theory 3 credit
(Prerequisite: ACC 361) Regulatory, legal, ethical, and technical issues related to the independent audit service. Examination of auditing standards, statistical methods and techniques involved in the examination of certain transaction cycles.

ACC 365 Dr. Linton, Staff
Federal Taxation of Corporations and Partnerships 3 credits
(Prerequisite: ACC 252) An introduction to the taxation of C and S corporations and partnerships, including analyses of the tax consequences of their formation, operation, and liquidation.

ACC 370 Dr. Mahoney
Fraud Detection and Control 3 credits
(Prerequisite: ACC 252, 254, or 210) This course provides the student with an understanding of the various forms of fraud that take place within and outside of the organization. The student is exposed to the control and investigative techniques essential to the prevention and detection of these frauds. A variety of methodological techniques are used throughout the semester, including lecture, class discussion, case analysis, and presentations by fraud-detection experts. This course involves a great deal of outside preparation.

ACC 460 Drs. Mahoney, Mensah
Advanced Accounting I 3 credits
(Prerequisite: ACC 362) The theories and promulgated standards of accounting related to multiple business units, including accounting for business combinations, consolidated financial statements, minority interest, and branch accounting. Also covered is governmental and nonprofit accounting.

ACC 461 Drs. R.J. Grambo, Johnson,
Cost Accounting Lawrence, Staff
3 credits
(Prerequisites: junior standing, ACC 252) Theories, techniques and procedures in cost accumulation, reporting and control, including such topics as job-order costs, process costs, by-products and joint-products costing, and standard cost and variance analysis.

ACC 462 Drs. R.J. Grambo, Johnson,
Advanced Managerial Lawrence
Accounting 3 credits
(Prerequisite: ACC 461) Accounting techniques as control devices in business with emphasis on the use of accounting data in business decisions. Topics to include budgeting and profit planning, cost-volume-profit analysis and direct costing.

ACC 470 Dr. Linton, Staff
Law for Accountants 3 credits
(Prerequisite: MGT 251) A study of the law of contracts, sales, commercial paper, secured transactions, rights of debtors and creditors, and bankruptcy.

ACC 471 Dr. R.J. Grambo, Staff
Management Auditing 3 credits
(Prerequisite: ACC 362) An in-depth examination of the accountant in the manager's position. Includes administrative effectiveness and efficiency as provided through sound internal controls, and design and implementation of monitoring systems within the organization to promote better cost-benefit decisions.

ACC 472 Drs. Mahoney, Mensah, Staff
Advanced Accounting II 3 credits
(Prerequisite: ACC 362) A study of the theories and promulgated standards of accounting related to international operations, partnerships, estates and trusts, installment sales, consignments, SEC reporting, and interim financial reporting.

ACC 473 Dr. Ellis, Staff
Advanced Auditing 3 credits
(Prerequisite: ACC 364) An examination of statistical analysis in making audit judgements; internal control and auditing issues relating to EDP systems; risk assessment and testing for certain transaction cycles; and other attestation services and reports.

ACC 474 Dr. R.J. Grambo, Staff
Accounting Information 3 credits
Systems
(Prerequisite: ACC 252) The design and application of accounting systems in both the manual and automated environments. Analysis of information's accumulation and use patterns in organizations with a focus on providing useful and timely information. Extensive computer usage of Professional Business Software.

ACC/IB 475 Dr. Lawrence, Staff
International Accounting 3 credits
(Prerequisites: ACC 252 or 254, ECO 351) This course is designed for both accounting and non-accounting majors with an interest in global accounting issues. The environmental influences on accounting development, reporting standards for selected countries, and the harmonization of accounting standards are explored. Additional topics covered include financial reporting and statement analysis, accounting for foreign currency translation and transactions, and managerial accounting issues for multinational business entities.

ACCOUNTING INFORMATION SYSTEMS

DR. MICHAEL MENSAH, Chairperson, Accounting Department

The explosion of electronic commerce, the use of enterprise systems, the growth of global alliances and information sharing, and other information technology-driven developments have expanded the variety of opportunities available to professionals with a strong and integrated knowledge of accounting principles (the "language of business") and the evolving information technologies needed to implement and manage accounting information systems (AIS). AIS professionals provide value to their organizations or clients by using their skills to help generate reliable, timely, and relevant decision-making information for the use of managers and other stakeholders. These professionals assist their organizations or clients in assessing the opportunities and risks associated with specific information technology deployments. They also oversee the implementation and management of accounting systems within their organizations. In the assurance sector, AIS professionals often function as information systems auditors. They provide accounting, technology, and other skills to support traditional as well as paperless audits. They are often called upon to assist in special investigations such as fraud audits and forensic accounting.

The objective of the AIS major is to prepare students to function in the corporate, public accounting, and non-profit sectors as entry-level accounting systems professionals. Students can select electives for either an accounting information systems auditing or a general information systems management emphasis. AIS majors are encouraged to pursue professional certifications such as the Certified Information Systems Security Professional (CISSP), the Certified Information Systems Auditor (CISA), and the Certified Internal Auditor (CIA). In addition, students may also plan to become Certified Public Accountants (CPA) or Certified Fraud Examiners (CFE). The AIS major is a four-year undergraduate program. However, students may use the combined BS/MBA program at the University to meet the 150 hour requirement for CPA certification as needed. Qualified students have opportunities for on-the-job training through our internship program

ACCOUNTING-INFORMATION SYSTEMS

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
GE S/BH	ECO 153-154	Prin. of Micro-Macro Economics	3	3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy	3	
GE PHIL-T/RS	T/RS 121	Theology I		3
GE C/IL	C/IL 104	Computing and Information Literacy		3
GE QUAN	MATH ELECT[1]	Math Option-2 courses	3-4	3-4
GE HUMN	HUMN ELECT [2]	Humanities Elective	3	
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar/Physical Education	1	1
			16-17	**16-17**
		SECOND YEAR		
BUS CORE	ACC 251-252	Financial Accounting I-II	3	3
BUS CORE	STAT 251-252	Statistics for Business I-II	3	3
BUS CORE	MGT 251	Legal Environment of Business		3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT[3]	Free Elective	3	
			18	**18**
		THIRD YEAR		
MAJOR	ACC 361-362	Intermediate Accounting I-II	3	3
MAJOR	ACC 364	Auditing		3
MAJOR	AIS 362	Database Management Systems for Electronic Business		3
BUS CORE	ACC 474	Accounting Information Systems	3	
BUS CORE	MGT 351-352	Principles of Management I-II	3	3
BUS CORE	FIN 351-MKT 351	Intro. to Finance-Intro. to Marketing	3	3
BUS CORE	OIM 351-OIM 352	Intro to Mgt. Science-Intro to Operations Mgt.	3	3
BUS CORE	ECO/IB 351	Environment of International Business	3	
			18	**18**
		FOURTH YEAR		
MAJOR	AIS 373	Object Oriented Application in Bus. & Acctg.	3	
MAJOR	AIS 372	Accounting for Electronic Business	3	
MAJOR	AIS 483	Business Applications of Communication Networks		3
MAJOR	AIS ELECT[4]	AIS Electives	3	3
BUS CORE	MGT 455	Business Policy & Strategy		3
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
GE ELECT	ELECT[2]	Free Elective	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
			Total: 136-138 CREDITS	

[1] See note on Math Options on page 224.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

[4] Recommended audit electives include AIS 473 or ACC 473, AIS 381 and AIS 367. General systems electives include AIS 367, ACC 461, ACC 460, ACC 470 and ACC 363.

AIS 362 Dr. Kakumanu
Database Management Systems for Electronic Business 3 credits

(Prerequisite: ACC 474) The course deals with database design, implementation and use of Database Management Systems to support Electronic Business. The topics covered include: database design and implementation; data modeling and structured query language (SQL); distributed data base management system, open data base connectivity, integration of web server and backend database server; data warehousing and mining; on-line analytical processing; and database application and management. Cases and DBMS software will be used to illustrate concepts and gain hands-on experience. (AIS 362 and EC 362 are offered jointly.)

AIS 367 Drs. Mensah, Lawrence
Enterprise Accounting and Control 3 Credits

(Prerequisites: ACC 252 or ACC 254, junior standing) This course is concerned with how accounting principles, methods, and techniques are harnessed to meet the reporting needs of an organization in integrated management and information technology environment. It is designed to demonstrate the integration of both financial and managerial accounting procedures with the core business processes and organizational elements of an enterprise to produce enterprise-wide real- time reporting capabilities. Students will be exposed to the business processes and the integrated operation of accounting functions in a simulated model company that uses a state of the art systems software to capture data and share information. Students will acquire hands-on experience with enterprise software configuration and operation, but the main goal of the course is to teach the accounting and reporting goals implicit in such activities. (AIS 367 and EMT 367 are offered jointly.)

AIS 372 Dr. Ron Grambo
Accounting for Electronic Business 3 credits

(Prerequisites: ACC 252 or ACC 254, junior standing) This course is intended to introduce E-Commerce students to the role of accounting in today's business environment. Students will examine how technology has impacted the techniques of accounting and reporting. Computerized models of accounting will be used to explore the tools available to compile data for management decision and reporting. Internet business and traditional business transactions will be evaluated in light of global markets. The students will see the effects of control features built into software systems and understand the role such systems play in running the company. (AIS 372 and EC 372 are offered jointly.)

AIS 373 Dr. Solieri
Object Oriented Applications in Business and Accounting 3 credits

(Prerequisite: ACC 474) This course is an introduction to the design and analysis of computer systems utilizing an object-oriented approach. Topics include: major methodologies, methods and techniques for analysis and design, concepts and techniques for development projects, CASE tool support development work, and approaches to planning for systems implementation, evaluation, and maintenance. This course will introduce students who have a basic understanding of computer concepts to programming languages currently being used by the business community.

AIS 381 Drs. Solieri, Kakumanu
Electronic Business 3 credits
Information Systems Security & Ethics
(Prerequisite: AIS 362) The course is designed to provide students with an understanding of the technical, managerial, legal and ethical issues involved in building, operating, and managing e-commerce solutions. The topics covered include: web server and client security; secure transactions and payments; information security; digital certificates and practices; civil and criminal legal issues; moral and ethical issues; intellectual property and patents; governmental regulations and policies; and emerging technologies and standards. Appropriate cases will be used to illustrate the concepts and emphasis on the role of various topics discussed in this course to conduct business on the Internet. (AIS 381 and EC 471 are offered jointly.)

AIS 473 Drs. Ellis-Westwell, Solieri
Advanced Auditing Issues: 3 credits
Information Systems Auditing
(Prerequisites: ACC 364 and ACC 474) The fundamentals of concepts and principles of information systems (IS) auditing. Understanding accounting information system controls, types of IS audits, risk assessment and concepts, and Computer-Assisted Audit Techniques (CAATs) used in IS audits. The objective of this course is to develop competence in information systems auditing (the audit and control of computer-based information systems) by focusing on the design and implementation of audit approaches in automated settings. Specific use of CAAT software will assist the student in gaining an awareness of various techniques used in the profession.

ACC 474 Drs. Solieri, Grambo,
Accounting Information Lawrence
Systems 3 credits
(Prerequisite: ACC 252) The design and application of accounting systems in both the manual and automated environments. Analysis of information's accumulation and use patterns in organizations with a focus on providing useful and timely information. Extensive computer usage of Professional Business Software.

AIS 483 Drs. Kakumanu,
Business Applications Prattipati
of Communication Networks 3 credits
(Prerequisite: ACC 474) Use of computer and telecommunication networks to achieve organizational goals. Topics include data communications; planning and design of communication networks; data integrity, independence and security, client-server computing; global communication; the Internet; applications of telecommunication networks and current issues and future trends. (AIS 473, EC 473, and OIM 473 are offered jointly.)

ECONOMICS

DR. SATYAJIT GHOSH, Chairperson

The major in Economics, which is available both through The Kania School of Management and The College of Arts and Sciences, provides an excellent training for understanding the economic events and developments of our complex industrialized society and of the world economies. It equips the student with training and background needed to assume responsible managerial positions in industry, commerce, banking, or government service. It also gives a strong preparation for the pursuit of graduate studies in Economics or the legal profession.

MINOR: 18 credits consisting of ECO 153, 154 (or ECO 101,102), 361, 362, plus two upper level ECO courses (SOM majors may not use ECO 351).

ECONOMICS

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
MAJOR (GE S/BH)	ECO 153-154	Principles of Micro-Macro Economics	3	3
GE WRTG-SPCH	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE PHIL	PHIL 120	Introduction to Philosophy	3	
GE T/RS	T/RS 121	Theology I		3
GE C/IL	C/IL 104	Computing and Information Literacy		3
GE QUAN	MATH ELECT[1]	Math Option-2 courses	3-4	3-4
GE HUMN	HUMN ELECT [2]	Humanities Elective	3	
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1	1
			16-17	**16-17**
		SECOND YEAR		
MAJOR	ECO 361-362	Intermediate Micro-Macro Econ.	3	3
MAJOR	STAT 253	Statistics for Economics		3
COGNATE[4]	ACC 253	Financial Accounting	3	
COGNATE[4]	ELECT	Cognate Elective		3
GE PHIL-T/RS 122	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE HUMN	HUMN ELECT	Humn. Electives (HIST 110-111 recom.)	3	3
GE ELECT	ELECT[3]	Free Elective	3	
			18	**18**
		THIRD YEAR		
MAJOR	ECO/IB 351-ECO/IB 375	Env. of Intl. Bus.-Intl. Economics	3	3
MAJOR	ECO 363	Applied Econometrics	3	
MAJOR	ECO ELECT	Eco Elective	3	
COGNATE[4]	FIN 351 - ELECT	Intro. to Fin.-Cognate Electives	3	6
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
GE ELECT	ELECT	Free Elective		3
COGNATE[4]	ELECT	Cognate Elective	3	
			15	**15**
		FOURTH YEAR		
MAJOR	ECO 460	Monetary & Fin. Eco.	3	
MAJOR	ECO SEM - ECO 471	Eco. Seminar-Advanced Macro.	3	3
COGNATE[4]	ELECT	Cognate Electives	3	3
GE HUMN	HUMN ELECT	Humanities Elective		3
GE ELECT	ELECT	Free Electives	6	6
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**

Total: 130-132 CREDITS

[1] See note on Math Options on page 224.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

[4]. Economics majors may apply up to six cognate credits toward a math minor. Students taking the sequence open to math majors are strongly urged to complete the calculus sequence by taking MATH 222, particularly if they plan on pursuing graduate studies.

Economics majors registered in The Kania School of Management will apply nine of their elective cognate credits to one of the following areas (exceptions require the permission of the SOM dean): accounting, finance, international business, management, marketing, operations management. The remaining cognate credits may be applied to the social sciences or from the other business areas (but note that no more than 30 credits altogether can be taken in business subjects, exclusive of economic courses). Care must be taken to observe prerequisites.

ECO 101 Staff
(S)Current Economic Issues 3 credits
Intended to provide a foundaton in economics for non-business students. This course provides analysis of contemporary economic issues relevant to the U.S. economy in particular and the world in general. Issues such as economic policy, budget deficit, federal debt, recession, unemployment, inflation, health care, environment, and regulation of business are studied. Tools of micro and macroeconomic analysis are developed in the context of these issues. *Not open to Economics majors or students with credit for ECO 153-154.*

ECO 102 Staff
Fundamentals of 3 credits
Economic Analysis
Designed to provide students who have minimal mathematical background an understanding of economics through application of basic quantitative methods. Statistical concepts and mathematical models are discussed and applied, using electronic spreadsheets to examine issues critical to business firms, households, society, and economy in the aggregate. *Not open to Economics majors.*

ECO 103 Dr. Scahill, Staff
(S) The Economics of 3 credits
Environmental Issues
This course provides students with a framework for viewing environmental issues as economic issues. The operation of a system of markets and prices and the sources of "market failure" are explained. Alternative methods for addressing environmental problems are examined, including "command and control" regulatory policies and "market-based" policies. The evolution of public policies toward the environment is discussed. *Not open to Economics or Business majors or minors.*

ECO 153 Staff
(S)Principles of 3 credits
Microeconomics
This course centers on the salient characteristics of the modern free-enterprise economy. Topics include the operations of the price system as it regulates production, distribution, and consumption, and as it is in turn modified and influenced by private groups and government.

ECO 154 Staff
(S)Principles of 3 credits
Macroeconomics
This course analyzes the determinants of aggregate economic activity. The main areas studied are the monetary and banking system, the composition and fluctuations of national income, and inflation, all as influenced by monetary and fiscal policy.

ECO 200 Dr. Ralph Grambo, Staff
(S)Economic Security 3 credits
and Personal Finance
A survey of the practical approaches to achieving economic security. Topics include risk management, essentials of budgeting, savings, and credit planning, planning for taxes, investments, retirement and estates. *Not open to Economics or Business majors or minors.*

ECO/IB 351 Staff
(D)Environment of 3 credits
International Business
(Prerequisites: ECO 153-154 or ECO 101, junior standing) This course introduces the student to the growing field of international business, touching on the economic, social and political environments of international trade and multinational corporations. International institutions and agencies that impact on international business are discussed and practical aspects of these topics are emphasized.

ECO 361 Dr. Ghosh, Dr. Nguyen
Intermediate Microeconomics 3 credits
(Prerequisite: ECO 153) This course centers on the analysis of production and cost-theories. The topics studied are pure competition, monopoly, oligopoly, monopolistic competition and factor pricing. Economics majors take in sophomore year; Finance majors in the junior year.

ECO 362 Dr. Ghosh, Dr. Nguyen
Intermediate Macroeconomics 3 credits
(Prerequisite: ECO 154) Course centers on the study of national income accounting, price level fluctuations, issues of unemployment, inflation, full employment, and impact of monetary and fiscal policy on income level and distribution. Economics majors take in sophomore year; Finance in junior year.

ECO 363 Dr. Nguyen
Applied Econometrics 3 credits
(Prerequisites: ECO 361, ECO 362, STAT 253) This course deals with the modeling and estimation of relationships as applied to economics. The topics covered include single-equation structural modeling and time-series modeling; estimation methods and problems; testing of economic hypotheses; and forecasting. The emphasis of the course is on applications involving the use of actual data.

ECO 364 Dr. Corcione
Labor Economics and Labor Regulations 3 credits
(Prerequisites: ECO 153-154) Analysis of labor supply and demand; measurement and theory of unemployment; occupational choice; wage differentials; labor-market issues and policies; labor legislation.

ECO 365 Dr. Ghosh
Mathematical Economics 3 credits
(Prerequisites: ECO 361, ECO 362, STAT 253, MATH 107, MATH 108 or permission of the instructor) This course studies the methodology of modern economic analysis. Emphasis is placed on developing the rigorous theoretical foundations of micro and macroeconomics using tools of calculus and linear algebra. Topics such as comparative static analysis, general -equilibrium analysis, consumer and firm behavior, intertemporal decision-making, decision-making under uncertainty, theory of growth and rational-expectation hypothesis are covered.

ECO 366 Dr. Trussler
Economic Geography 3 credits
(Prerequisites: ECO 153-154) This course will examine the broad areas of the spatial organization of economic systems and the location of economic activity. The discussion will encompass spatial decision-making for manufacturing industries, the service sector, and agricultural enterprises. The role of transportation in determining optimal locations and optimal flow of goods, information, and people will be emphasized. The spatial organization of the growth and development of cities and regions will also be discussed, as will the related topic of the development of nations within the global economy.

ECO/IB 375 Staff
International Economics 3 credits
(Prerequisites: ECO 153-154, ECO 351 or permission of the instructor) This course explains the rationale for international trade and gains from trade and discusses various trade policies. Topics covered in the course include: comparative advantage, free trade and trade restrictions (tariffs, quotas, etc.), the trade policy of the United States, exchange rates and their determinants, balance-of-payments analysis and the significance of multinational corporations.

ECO 410 Dr. Scahill
Economics for K-12 Teachers 3 credits
Provides an introduction to fundamental economic concepts as well as a review of techniques and materials (print, audio-visual, etc.) that can be used to teach economics at the K-12 grade levels. Emphasis is placed on strategies designed to integrate economics into such courses as language arts, mathematics and social studies. The course may not be used as a substitute for other economics courses.

ECO 460 Drs. Corcione, Nguyen
Monetary and Financial Economics 3 credits
(Prerequisite: ECO 362, FIN 351) This course emphasizes the interrelations between financial markets, financial institutions and aggregate economic activity. Topics include: an overview of financial institutions, introduction to money and capital markets, fundamentals of interest rates, the money supply process, the conduct of monetary policy, and other topics that occupy the subject matter of money and financial markets.

ECO 461 Drs. Ghosh, Scahill
Managerial Economics 3 credits
(Prerequisite: ECO 361) Teaches the use of economic tools for managerial decision making. Topics include discussion of applicable economic, statistical and computer skills. Emphasis is on the microeconomic theory of the firm and how this is applied.

ECO 462 Drs. Trussler, Ghosh
Urban and Regional Economics 3 credits
(Prerequisites: ECO 361, 362) This course examines the tools, measurements and theories utilized in studying the economy of urban areas and regions. Issues such as growth, decline, housing, poverty and environmental concerns are examined in a public policy context.

ECO 463 Dr. Bose
Public Finance and Taxation 3 credits
(Prerequisite: ECO 362) This course examines government expenditures, budgets, intergovernmental fiscal relations, public debt, fiscal policy and the principles of taxation.

ECO 464 Dr. Ghosh
Environmental Economics and Policy 3 credits
(Prerequisite: ECO 361) This course provides a detailed and rigorous introduction to the subject matter of environmental economics. Topics include the economic effects and control of pollution, the optimal use of natural resources (e.g., land, water, minerals, fishery and forests) and formulation and evaluation of environmental policy.

ECO 465 Dr. Ghosh
Development Economics 3 credits
(Prerequisites: ECO 153-154) This course introduces students to contemporary development economics. Topics include: the concept and measurement of economic development, the problems and prospects of the less developed countries, and the alternative theories and processes of economic development.

ECO 470 Dr. Corcione
Law and Economics 3 credits
(Prerequisite: ECO 361 or permission of the instructor) This course focuses on the public-policy implications of law and economics. It is based on the notion that legal rules establish implicit prices for different types of behavior and that consequences of these rules can be analyzed using microeconomics. In particular, microeconomic theory is used to analyze economic aspects of property, contracts, torts, and crime.

ECO 471 Dr. Ghosh
Advanced Macroeconomics 3 credits
(Prerequisites: ECO 362, 460, 363 or permission of the instructor) This course centers on the study of recent advances in macroeconomic analysis. Topics include empirical macroeconomic analysis, open-economy macroeconomics, the role of expectations, economic policy and economic growth.

ECO 490 Staff
Economics Seminar 3 credits
Advanced study of a special area in economics. Topics and prerequisites vary.

The following courses are offered infrequently: ECO 102, ECO 200, ECO 366, ECO 462, ECO 464. See department chair for their schedules.

ELECTRONIC COMMERCE

DR. PRASADARAO KAKUMANU, Chairperson, Operations and Information Management Department

Electronic commerce is an emerging business environment that provides common business services, multimedia content publishing and secure interactive web sites by integrating back-end and front-end applications. The necessary electronic commerce infrastructure is provided by integrating information and telecommunication technologies, the Internet and the World Wide Web, and business models that incorporate security, privacy, and legal issues. Electronic commerce lets companies reach new markets, operate around the clock, shorten the product-development cycle, enhance customer service, reduce or eliminate inventory related costs, and create enterprise links – all at lower costs. The phenomenal growth in online commerce increases the demand for people with skills in areas such as electronic commerce infrastructure, new business initiatives, law and security, electronic payment, financial services, and interactive marketing. The program below develops the knowledge and skills necessary for linked organizations in the new millennium.

MINOR: To minor in Electronic Commerce the student must take a minimum of 18 credits. Three courses are required: C/IL 104 (or equivalent), EC 251, and OIM 471 and any three of the following: EC 361, EC 362, EC 370, EC 371, EC 372, EC 461, EC 462, EC 470, EC 471, or EC 473.

ELECTRONIC COMMERCE

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FIRST YEAR		
GE S/BH	ECO 153-154	Prin. of Micro-Macro Economics	3	3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	3	3
GE C/IL	C/IL 104	Computer and Information Literacy		3
GE QUAN	MATH ELECT[1]	Math Option-2 courses	3-4	3-4
GE HUMN	HUMN ELECT[2]	Humanities Elective	3	
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1	1
			16-17	**16-17**
		SECOND YEAR		
BUS CORE	ACC 253-254	Financial-Managerial Accounting	3	3
BUS CORE	STAT 251-252	Statistics for Business I-II	3	3
BUS CORE	MGT 251	Legal Environment of Business		3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
MAJOR	EC 251	Introduction to Electronic Commerce	3	
BUS CORE	OIM 471	Business Information Management		3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT[3]	Free Elective	3	
			18	**18**
		THIRD YEAR		
MAJOR	EC 361	Electronic Business Comm. Networks	3	
MAJOR	EC 362	Database Mgt. for Electronic Business		3
MAJOR	EC ELECT	EC Electives	3	3
BUS CORE	MGT 351-352	Principles of Management I-II	3	3
BUS CORE	MKT 351-FIN 351	Intro to Marketing-Intro to Finance	3	3
BUS CORE	OIM 351-OIM 352	Intro to Mgt. Science-Intro to Oper. Mgt.	3	3
BUS CORE	ECO/IB 351	Environment of Intl. Business	3	
GE PHIL-T/RS	PHIL-T/RS	Philosophy or T/RS Elective		3
			18	**18**
		FOURTH YEAR		
MAJOR	EC 461	Internet Applications Development	3	
MAJOR	EC 462/ELECT	Projects in Electronic Business/Elect		6
BUS CORE	MGT 455	Business Policy & Strategy	3	
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE ELECT	ELECT	Free Electives	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**13**

Total: 133-135 CREDITS

[1] See note on Math Options on page 224.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. The GE free elective in the fourth year must be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

EC 251 Dr. Nabil Tamimi
Introduction to 3 credits
Electronic Business
(Prerequisite: C/IL 104) This course explores how the Internet has revolutionized the buying and selling of goods and services in the marketplace. Topics include: business-to-business and business-to-consumer electronic commerce, electronic commerce infrastructure, designing and managing online storefronts, payment acceptance and security issues, and the legal and ethical challenges of electronic commerce. Students will also gain hands-on experience in creating, editing, and enhancing a web site using an HTML editor.

EC 361 Dr. Prasad Kakumanu
Electronic Business 3 credits
Communication Networks
(Prerequisite: EC 251) The course is designed to provide students with networking and telecommunications fundamentals necessary to develop enterprise networks to conduct business on the Internet. Topics include: communication network media; processors and protocols; multimedia transmission; wireless networks; network design, management and security; present capabilities and future trends in communication. Discussion is focused on business applications within and among organizations. Hands-on experience and case studies will be used to illustrate concepts and business use of enterprise networks.

EC 362 Dr. Prasad Kakumanu
Database Management Systems 3 credits
for Electronic Business
(Prerequisites: EC 251, OIM 471) The course deals with database design, implementation and use of Database Management Systems to support Electronic Business. Topics include: database design and implementation; data modeling and structured query language (SQL); distributed data base management system, open data base connectivity, integration of web server and backend database server; data warehousing and mining; on-line analytical processing; and database application and management. Cases and DBMS software will be used. (EC 362 and AIS 362 are offered jointly.)

EC 370 Drs. Zych, Chattopadhyay
Interactive Marketing 3 credits
(Prerequisites: MKT 351, junior standing) This course focuses on the integration of state-of-the-art interactive technologies in the design and implementation of marketing programs. The functions of market identification through customer analysis, and the planning and implementation of conception, pricing, promotion and distribution of ideas, goods and services to satisfy the market benefit immensely from the capabilities of the rapidly developing information technology (IT) infrastructure. (EC 370 and MKT 370 are offered jointly.)

EC 371 Dr. Murli Rajan
Investments 3 credits
(Prerequisites: FIN 351, junior standing) This course provides students with an overview of the fundamentals of investing, with specific emphasis on the use of information technology tools. Topics include stock selection and valuation, bond valuation, and the use of options and futures to hedge risk. Students will be taught to use internet resources in order to develop security selection rules and valuation models. For example Quicken.com and Hoovers have web sites that enable an investor to retrieve current financial data and build stock screens. Students will also learn to build a financial web site that contains features found in many professional web sites.

EC 372 Dr. Ron Grambo
Accounting for 3 credits
Electronic Business
(Prerequisites: ACC 252 or ACC 254, junior standing) This course introduces E-Commerce students to the role of accounting in today's business environment. Students will examine how technology has impacted the techniques of accounting and reporting. Computerized models of accounting will be used to explore the tools available to compile data for management decisions and reporting. Internet business and traditional business transactions will be evaluated in light of global markets. Thus students will see the effects of control features built into software systems and understand the role such systems play in running the company. (EC 372 and AIS 372 are offered jointly.)

EC 461 Dr. Prasad Kakumanu
Internet Applications Development 3 credits
(Prerequisites: EC 361, EC 362) An introduction to existing and evolving Internet technologies needed for E-commerce-site development and management. Topics include: Windows NT, Internet information server, index and transaction servers, object-oriented paradigm, client and server-side scripting, active server page, enterprise data access, domain name service, and trends in web-development tools. Emphasizes applications of the technology, case studies and provides hands-on experience by having students develop a working electronic business site.

EC 462 Dr. Prasad Kakumanu
Projects in Electronic Business 3 credits
(Prerequisite: EC 461) In this course, students will develop an E-commerce project that will be used to conduct online business. The purpose of this course is to synthesize the Internet-related technologies and the business knowledge acquired in different courses to develop a working electronic commerce site. Students will work in a team-oriented environment under the guidance of the instructor. Students will design, develop, implement, and operate a secure, content-rich electronic commerce web site to attract and retain customers.

EC 470 Dr. Chattopadhyay
Supply Chain Management 3 credits
(Prerequisite: OIM 352 or permission of the instructor) This course integrates two powerful trends that are critical management imperatives: Supply-Chain Management and Electronic Business. The students will learn how the principles of supply-chain management integrate into the "real-time" environment of e-business and examine case studies of such implementations. Latest software and technology will be discussed and examples demonstrated on the SAP R/3 platform available at KSOM. (EC 470 and OIM 366 are jointly offered.)

EC 471 Dr. Kakumanu, Mr. DeSanto
Electronic Business Information Systems Security & Ethics 3 credits
(Prerequisites: EC 361, EC 362) The course provides students with an understanding of the technical, managerial, legal and ethical issues to build, operate and manage E-commerce solutions. Topics include: web-server and client security; secure transactions and payments; information security; digital certificates and practices; civil and criminal legal issues; morality and ethical issues; intellectual property and patents; governmental regulations and policies; and emerging technologies and standards. (EC 471 and AIS 381 are offered jointly.)

EC 472 Dr. Prattipati
Electronic Business and Entrepreneurship 3 credits
(Prerequisites: EC 361, EC 362) This course links E-commerce with entrepreneurship. The convergence of information and communication technologies has created numerous opportunities to entrepreneurs to start new and innovative businesses based on electronic commerce. It examines the issues related to the starting and establishment of new businesses based on E-commerce. The course comprises three parts. The first part focuses on issues related to the establishment of a new business and entrepreneurship. The second part examines the business issues related to E-commerce including the development of business models and plans. In the last part, students will develop and establish small E-commerce businesses from start to finish. (EC 472 and OIM 472 are jointly offered.)

EC 473 Drs. Kakumanu Prattipati, Staff
Business Applications of Communication Networks 3 credits
(Prerequisite: OIM 471) Use of computer and telecommunication networks to achieve organizational goals. Topics include data communications; planning and design of communication networks; data integrity, independence and security; client-server computing; global communication; the Internet; applications of telecommunication networks and current issues and future trends. (EC 473, AIS 483, and OIM 473 are jointly offered.)

ENTERPRISE MANAGEMENT TECHNOLOGY

DR. SATYA N. PRATTIPATI, Program Director

The major in Enterprise Management Technology (EMT) is a general management program with emphasis on information technology. The program's focus is on the integrated management of the whole enterprise rather than the management of individual functional areas. It is designed to produce graduates with expertise in integrated business processes and the use of Enterprise Management Planning systems popularly known as ERP systems. This program is enabled by a fully functional SAP R/3 system provided through The Kania School's alliance with SAP America. EMT courses build upon the foundation provided by core courses in all business areas. These courses are followed by more advanced courses in each functional area which use ERP systems to manage and integrate the processes. Project-oriented courses, including business consulting, complete the program. The EMT major is a good choice for individuals desiring careers in information systems consulting or general management with an Information Technology emphasis. It is also an excellent preparation for graduate studies in business.

ENTERPRISE MANAGEMENT TECHNOLOGY

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
GE S/BH	ECO 153-154	Prin. of Micro-Macro Economics	3	3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE T/RS-PHIL	T/RS 121-PHIL 120	Theology I-Intro Philosophy I	3	3
GE C/IL	C/IL 104	Computer and Information Literacy		3
GE QUAN	MATH ELECT[1]	Math Option-2 courses	3-4	3-4
GE HUMN	HUMN ELECT[2]	Humanities Elective	3	
GE FSEM/PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1	1
			16-17	**16-17**
		SECOND YEAR		
BUS CORE	ACC 251-252	Financial Accounting I-II	3	3
BUS CORE	STAT 251-252	Statistics for Business I-II	3	3
BUS CORE	MGT 251	Legal Environment of Business		3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT[3]	Free Elective	3	
			18	**18**
		THIRD YEAR		
MAJOR	EMT 351	Business Process Overview	3	
MAJOR	EMT 367	Enterprise Accounting and Control		3
BUS CORE	FIN 351	Introduction to Finance	3	
BUS CORE	MKT 351	Introduction to Marketing	3	
BUS CORE	OIM 352	Introduction to Operations Management		3
BUS CORE	OIM 351	Intro to Management Science	3	
BUS CORE	MGT 351-352	Principles of Management I-II	3	3
BUS CORE	ECO/IB 351	Environment of Intl. Business		3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
GE HUMN	HUMN ELECT	Humanities Elective		3
			15	**18**
		FOURTH YEAR		
MAJOR	EMT 460	Customer Support Systems	3	
MAJOR	EMT 461	Enterprise Treasury Management		3
MAJOR	EMT 462	Production Planning and Control	3	
MAJOR	EMT 463	Enterprise HR Systems		3
MAJOR	EMT 470	Enterprise Information Systems	3	
MAJOR	EMT 471	Configuration and Consulting		3
BUS CORE	MGT 455	Business Policy and Strategy		3
BUS CORE	OIM 471	Business Information Management	3	
GE ELECT	ELECT	Free Electives	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**

Total: 133-135 CREDITS

[1] See note on Math Options on page 224.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. The GE free elective in the fourth year must be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

EMT 351 Staff
Business Process Overview 3 credits
This is the first course in the area of Enterprise Management. Its main goal is to help students study and appreciate the integration of a company's core business processes. Students will be exposed to the main business processes that drive an organization, the interactions within and between them, and the effect of integration on the decision-making environment. As major tools for demonstrating business process integration and closely related issues such as business process re-engineering, this course uses ad enterprise-wide integrated information-systems software and simulated data for a model company. (EMT 351 and OIM 353 are offered jointly.)

EMT 367 Staff
Enterprise Accounting and Control 3 credits
(Prerequisites: Acc 251-252 or Acc 253-254) This course is concerned with how accounting principles, methods, and techniques are harnessed to meet the reporting needs of an organization in an integrated management-and-information-technology environment. It is designed to demonstrate the integration of both financial and managerial accounting procedures with the core business processes and organizational elements of an enterprise to produce enterprise-wide real-time reporting capabilities. Students will be exposed to the business processes and the integrated operation of accounting functions in a simulated model company that uses state-of-the-art systems software to capture data and share information. Students will acquire hands-on experience with enterprise software configuration and operation, but the main goal of the course is to teach the accounting and reporting goals implicit in such activities. (EMT 367 and AIS 367 are offered jointly.)

EMT 460 Staff
Customer Support Systems 3 credits
(Prerequisites: EMT 351, MKT 351)
An interdisciplinary approach to enterprise management that focuses on the customer is emphasized in this course. The objective of the course is to orient enterprise-wide decision-making to successful customer-relationship management on an ongoing basis. This is made possible by utilizing all available information to develop a shared view of the customer throughout the enterprise, and using best practice offerings that are tailored to the appropriate customer-relationship life-cycle stage. A state-of-the-art industry standard enterprise management software will be used as a platform for demonstration and simple project implementation. (EMT 460 and MKT 460 are offered jointly.)

EMT 461 Staff
Enterprise Treasury Management 3 credits
(Prerequisites: EMT 351, FIN 351)
The analysis of decisions that constitute the liquidity-related (working-capital) decisions of the firm. These include the following areas: management of the firm's liquid resources: cash, short-term investments, accounts receivable and inventory, management of the firm's access to borrowing, controlling the diverse dimensions of risk, managing the information flows needed to identify performance. This course includes topics and examples of Treasury Management using Enterprise Management Systems. (EMT 461 and FIN 361 are offered jointly.)

EMT 462 Staff
Production Planning and Control 3 credits
(Prerequisites: EMT 351, OIM 352)
This course is concerned with the study of production planning and control activities in an enterprise resource-planning context. Topics include: aggregate planning, capacity planning, master production scheduling, material requirements planning, production-activity control, purchasing, inventory models, and Just-in-Time systems. A particular focus of this course will be the interactions between operations and the other functional areas of the business. This will be demonstrated using Enterprise Management Systems software.

EMT 463 Staff
Enterprise HR Systems 3 credits
(Prerequisites: EMT 351, MGT 351)
This course will describe and explain the preparation of job descriptions, demographics of labor resources, recruitment policies, interviewing techniques, hiring contracts, aptitude testing and performance evaluation, labor turnover and labor mobility, employee morale, complaints and grievances, disciplinary procedures, employee health and safety, wage-and-hour administration, and government regulations relating to labor. The handling of absenteeism, alcoholism and drug addiction and other functional duties of a human-resources department will also be covered. This course is fully integrated with the SAP HR system and includes: organizational structure, recruitment, employee management, career and succession planning, basic process flows in HR management, training and events management, business trip management, time management, work-schedule and shift management, payroll accounting and cost planning. (EMT 463 and MGT 361 are offered jointly.)

EMT 470 Staff
Enterprise Information Systems 3 credits
(Prerequisite: EMT 351)
This course is concerned with the management and operations of information systems in an integrated enterprise. It will examine the integrated business processes of an enterprise, using the leading enterprise systems software. Students will analyze and study enterprise systems software in detail. Students will be exposed to the management of the enterprise systems software. They will learn about business integration through the concepts of business engineering and business workflow. This course will also examine the procedures used to generate analytical reports using the concepts of data mining and data warehousing.

EMT 471 Staff
Configuration and Consulting 3 credits
(Prerequisite: EMT 351)
The focus of this course is on the implementation of enterprise systems projects and the role of consultants in such implementation. It will examine the integrated business processes of an enterprise, and the concepts of developing data models, business objects, and event-process chains. Students will acquire the skills to develop implementation plans for enterprise systems software. The course will also discuss the configuration procedures in implementing enterprise systems software. Several real life cases of actual implementation of enterprise systems will be discussed. The role of consultants in the implementation process will be examined in detail. There will be guest lectures from practicing consultants and from the representatives of the companies who implemented the enterprise systems software. The goal of the course is to prepare the students to become consultants in enterprise systems.

FINANCE

DR. SATYAJIT GHOSH, Chairperson

The practitioner in finance must be familiar with the tools and techniques available and, given the resources and constraints of organizations and the general economic environment in which the organization operates, be adept at efficiently managing the fiscal resources of the organization, including the raising of funds and their short-term and long-term investment. Career opportunities in Finance include:

Banking	Investments	Corporate
Bank Examiner	Financial Analyst	Financial Analyst
Trust Officer	Security Broker	WorkingCapital Management

MINOR: 18 credits consisting of ECO 153, 154, 351, FIN 351 and two upper level Finance courses (from FIN 361, 362, 470, 471, 472 and 475.)

FINANCE

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FIRST YEAR		
GE S/BH	ECO 153-154	Prin. of Micro-Macro Economics	3	3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	3	3
GE C/IL	C/IL 104	Computing and Information Literacy		3
GE QUAN	MATH ELECT[1]	Math Option, 2 courses	3-4	3-4
GE HUMN	HUMN ELECT[2]	Humanities Elective	3	
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			16-17	**16-17**
		SECOND YEAR		
BUS CORE	ACC 251-252	Financial Accounting I-II	3	3
BUS CORE	STAT 251-252	Statistics for Business I-II	3	3
BUS CORE	MGT 251	Legal Environment of Business		3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT[3]	Free Elective	3	
			18	**18**
		THIRD YEAR		
MAJOR	ECO 361-362	Intermediate Micro-Macro Economics	3	3
MAJOR	FIN 361	Working Capital Management		3
MAJOR	FIN 362	Investments		3
BUS CORE	MGT 351-352	Principles of Management I-II	3	3
BUS CORE	FIN 351-MKT 351	Intro. to Finance-Intro. to Marketing	3	3
BUS CORE	OIM 351-OIM 352	Intro. to Mgt. Science-Intro. to Oper. Mgt.	3	3
BUS CORE	ECO/IB 351	Environment of Intl. Business	3	
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
			18	**18**
		FOURTH YEAR		
MAJOR	ECO 460-FIN ELECT	Monetary & Fin. Eco.-Fin. Elective	3	3
MAJOR	FIN 470-FIN ELECT	Capital Investment and Structure-Fin. Elec.	3	3
BUS CORE	OIM 471	Business Information Management		3
BUS CORE	MGT 455	Business Policy & Strategy		3
GE HUMN	HUMN ELECT	Humanities Elective		3
GE ELECT	ELECT	Free Electives	6	
GE PHED	PHED ELECT	Physical Education	1	1
			13	**16**

Total: 133-135 CREDITS

[1] See note on Math Options on page 224.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

FIN 351 Staff
Introduction to Finance 3 credits
(Prerequisites: junior standing, ECO 153 or 101, ACC 252 or 253, or permission of the instuctor) This course introduces the business student to the field of finance. It serves as the foundation course for financial principles used in both financial-management and investment courses. Topics include time value of money, risk analysis, basic operation of the capital markets, current asset and liability analysis, and introduction to the topics of capital budgeting and cost of capital calculation.

FIN 361 Dr. R.W. Grambo, Dr. Hussain
Working Capital Management 3 credits
(Prerequisite: FIN 351) This course is designed to provide advanced study in the financial-management area through detailed analysis of financial statements, liquidity crises, cash optimization, credit analysis, banking arrangements, loan contracts, commercial paper and the use of money market. (FIN 361 and EMT 461 are offered jointly.)

FIN 362 Dr. Rajan
Investments 3 credits
(Prerequisite: FIN 351) An introduction to the theory and process of managing investments. Topics include practical operation of the equity markets, debt options and futures markets. Stock-valuation models using fundamental technical and random-walk approaches.

FIN 470 Dr. Kallianiotis
Capital Investment and Structure 3 credits
(Prerequisite: FIN 351) Advanced study in the "permanent" financial aspects of the firm, including capital-budgeting models, optimal-replacement processes, abandonment, leasing, cost of capital, capital structure, mergers and acquisitions, and bankruptcy.

FIN 471 Dr. Hussain, Staff
Derivative Securities 3 credits
(Prerequisite: FIN 362) Advanced work in speculation, hedging and arbitrage. Studies the use of speculative markets for profit and risk adjustment. Topics include options and futures pricing models, financial and index futures, and options, precious metals, and foreign exchange.

FIN 472 Dr. Hussain, Dr. Rajan
Portfolio Management 3 credits
(Prerequisite: FIN 362) Advanced study of professional management of various portfolios including those of banks, insurance companies, pension funds, and nonprofit institutions. Markowitz and Sharpe models, data availability, and computerized-data services are covered.

FIN 473 Dr. Kallianiotis
Financial Institutions 3 credits
(Prerequisite: ECO 362) The study of financial markets and financial institutions, including depository and nondepository institutions. Topics include regulation, operation, and management of financial institutions, financial instruments, interest-rate principles, risk-management strategies, loan analysis, and asset/liability management. Insurance and pension principles and investment banking are covered.

FIN/IB 475 Dr. Kallianiotis
International Finance 3 credits
(Prerequisites: ECO 351, FIN 351) This course deals with the environment of international financial management, foreign-exchange risk-management, multinational working-capital management, international financial markets and instruments, foreign-investment analysis, and management of ongoing operations. It also exposes students to a wide range of issues, concepts, and techniques pertaining to international finance.

INTERNATIONAL BUSINESS

DR. TRUSSLER, Program Director

The major in International Business is an interdisciplinary program designed for those Business students who seek an understanding of the complex world within which multinational corporations, national and international agencies, and individuals interact. In the twenty-first century all business activities are becoming more and more international in nature; it is imperative that those who wish to succeed in this international setting have a clear understanding not only of the theory and practice of the core business disciplines, but also of their interaction with the geographic, cultural, and political environments within which multinational corporations operate, and international trade and investment occur. This major is designed to prepare students who wish to work in the international arena – either overseas or in the U.S.

INTERNATIONAL BUSINESS

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
GE S/BH	ECO 153-154	Principles of Micro-Macro Economics	3	3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE PHIL-T/RS	PHIL 120[2]	Introduction to Philosophy		3
GE C/IL	C/IL 104	Computing and Information Literacy	3	
GE QUAN	MATH ELECT[1]	Math Option-2 courses	3-4	3-4
GE HUMN	HUMN ELECT	Foreign Language Electives	3	3
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1	1
			16-17	**16-17**
		SECOND YEAR		
BUS CORE	ACC 253-254	Financial-Managerial Accounting	3	3
BUS CORE	STAT 251-252	Statistics for Business I-II	3	3
BUS CORE	MGT 251	Legal Environment of Business	3	
GE PHIL-T/RS	PHIL 210	Ethics		3
GE T/RS	T/RS 121-122	Theology I-II	3	3
GE NSCI	NSCI ELECT[3]	Natural Science Electives	3	3
GE ELECT	ELECT[5]	Foreign Language Electives	3	3
			18	**18**
		THIRD YEAR		
MAJOR	IB ELECT[4]	Advanced IB Electives		6
BUS CORE	MGT 351-352	Principles of Management I-II	3	3
BUS CORE	MKT 351-FIN 351	Intro. to Marketing-Intro. to Finance	3	3
BUS CORE	OIM 351-OIM 352	Intro. to Mgt. Science-Intro. to Oper Mgt.	3	3
BUS CORE	ECO/IB 351	Environment of Intl. Business	3	
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
GE HUMN	HUMN ELECT	Regional/Global Electives	3	3
			18	**18**
		FOURTH YEAR		
MAJOR	IB ELECT[4]	Advanced IB Electives	6	6
BUS CORE	MGT 455	Business Policy & Strategy	3	
BUS CORE	OIM 471	Business Information Management		3
GE ELECT	ELECT[6]	Regional/Global Electives	3	3
GE ELECT	ELECT[3,5]	Free Electives	(3)	(3)
GE PHED	PHED ELECT	Physical Education	1	1
			13(16)	**13(16)**
		Total: 130-132 (136-138)		**CREDITS[5]**

[1] See note on Math Options on page 224.

[2] If EDUC 113 is required, it is taken in place of PHIL 120. C/IL 104 is then moved to the spring of the first year. PHIL 120 will be taken in the second year.

[3] If a third math course is required, GE electives are moved from the fourth to the second year. The NSCI sequence is moved to the fourth year.

[4] Four of the five functional international business courses and two electives from IB 476, 477, 490, ECO 366, 465 or the the fifth functional IB course.

[5] For students requiring EDUC 113 and a third math course, 6 additional credits are needed to complete the foreign-language requirement.

[6] Global Studies electives include GEOG 134 (recommended), PS 212, PS 213, T/RS 314. Regional Studies electives are courses that focus on specific countries or regions of the world (not U.S.), including culture courses taught in a foreign language.

ECO/IB 351 Dr. Trussler/Staff
(D)Environment of International Business 3 credits
(Prerequisites: ECO 153-154, junior standing) This course introduces the student to the field of international business, including the economic, social, and political environments of international trade and multinational corporations. International institutions and agencies that impact on international business are discussed and practical aspects of these topics are emphasized.

ECO/IB 375 Staff
International Economics 3 credits
(Prerequisites: ECO 153-154, 351 or permission of the instructor) This course explains the rationale for international trade and gains from trade and discusses various trade policies. Topics covered in the course include: comparative advantage, free trade and trade restrictions (tariffs, quotas, etc.), the trade policy of the United States, exchange rates and their determinants, balance-of-payments analysis, and the significance of multinational corporations.

ACC/IB 475 Drs. Johnson, Lawrence
International Accounting 3 credits
(Prerequisites: ACC 252 or 254, ECO 351) This course is designed for both accounting and non-accounting majors with an interest in global accounting issues. The environmental influences on accounting development, reporting standards for selected countries, and the harmonization of accounting standards are explored. Additional topics covered include financial reporting and statement analysis, accounting for foreign currency translation and transactions, and managerial accounting issues for multinational business entities.

FIN/IB 475 Dr. Kallianiotis
International Finance Management 3 credits
(Prerequisites: ECO 351, FIN 351) This course deals with the environment of international financial management, the foreign-exchange-risk management, the multinational working-capital management, the international financial markets and instruments, foreign investment analysis, and the management of ongoing operations. It also exposes students to a wide range of issues, concepts, and techniques pertaining to international finance.

MGT/IB 475 Dr. Chowdhury, Staff
International Management 3 credits
(Prerequisites: ECO 351, MGT 351) Designed as an advanced level undergraduate course on international business. Focuses on functional strategies of multinational corporations (MNCs), structure and control systems of MNCs, and comparative management. The specific MNC strategies to be covered include entry, sourcing, marketing, financial, human resource and public affairs. The study of structure and control systems delves into issues such as corporate structure, headquarters-subsidiary relationships. Study of comparative management systems focuses on nature of management systems and practices in different cultures. Projected as a mainly case-oriented course.

MKT/IB 475 Dr. Chattopadhyay
International Marketing 3 credits
(Prerequisites: MKT 351, ECO 351) Analysis of the marketing strategies of multinational corporations with emphasis on the internal environment of country markets. Discussions will include comparisons of different regional markets along socioeconomic, political and cultural lines. Different types of international market barricades and the corresponding market-entry strategies will be analyzed. Additional readings from international publications will be required.

IB 476 Staff
U.S.-East Asia Trade and Investment 3 credits
(Prerequisite: ECO 351) This course describes and analyzes trade and investment flows between the U.S. and Japan, China, Korea and Taiwan. Topics covered in the course include: economic trends in these countries, U.S. trade and investment with them, U.S. trade deficit, trade policies of the U.S. and these countries, analysis of Japan's KEIRETSU, Korea's CHAEBOL, China's MFN status and Taiwan's environmental problems.

IB 477 Dr. Trussler
European Business 3 credits
(Prerequisite: ECO/IB 351) This course introduces the student to the European business environment, focusing on the implications for international business operations and competitiveness. This includes the study of rapidly changing business environments in Central and Eastern Europe (CEE) as well as the nations of the European Union (EU). The elimination of barriers to trade, and the response of companies inside and outside the EU to the threats and opportunities of the Single Market are examined. The course also examines the impact on business of the democratization of the CEE countries and their move toward market economies.

IB 495 Dr. Cann
European Business Experience 3 credits
(Prerequisites: MGT 351, MKT 351, ECO/IB 351) Students who participate in this course will experience first-hand how business is conducted in Europe. Students will have an opportunity to participate in lecture-discussion sessions with top-level executives from various multinational corporations, local business firms, and government agencies in a number of different countries in Europe. Participants will gain a basic understanding of the issues prominent in international business today and experience the cultural, social and political environments of some of Europe's most interesting cities. Course involves travel to Europe. (IB 495, MGT 495, and MKT 495 are offered jointly.)

MANAGEMENT

DR. GERALD BIBERMAN, Chairperson

Management involves getting things done through people. The Management major provides students with a broad-based, generalist background that is designed to provide graduates with the skills and tools needed to cope successfully with the challenging roles and expectations that are sweeping through organizations. "Getting things done" involves analyzing, designing and continuously improving an organization's structure and processes. "Through people" involves leading, motivating, and working effectively with other people in teams and other settings. Management courses use a variety of teaching techniques that involve a high degree of student/faculty interaction–including experiential exercises, student presentations, simulations and team activities–to develop self-analytic skill, team and communication skills. Students working with their faculty and advisors can choose from a variety of courses to design a program of study that will prepare them to enter a variety of positions in private industry and other organizations.

MINORS:

Management of Structures and Systems — This minor focuses on the skills a successful manager needs to plan, organize, maintain, and improve an organization's structures and systems. The student will take MGT 351, 352, 460, 461, 462 and any upper-level management elective except MGT 455.

Management of People and Teams — This minor focuses on the skills a successful manager needs to meet the management challenges of people and teams in today's workplace. The student will take MGT 351, 352, 361, 362, 471 and any upper-level Management elective except MGT 455.

MANAGEMENT

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
GE S/BH	ECO 153-154	Prin. of Micro-Macro Economics	3	3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy		3
GE PHIL-T/RS	T/RS 121	Theology I	3	
GE C/IL	C/IL 104	Computing and Information Literacy		3
GE QUAN	MATH ELECT[1]	Math Option-2 Courses	3-4	3-4
GE HUMN	HUMN ELECT[2]	Humanities Elective	3	
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			16-17	**16-17**
		SECOND YEAR		
BUS CORE	ACC 253-254	Financial-Managerial Accounting	3	3
BUS CORE	STAT 251-252	Statistics for Business I-II	3	3
BUS CORE	MGT 251	Legal Environment of Business	3	
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT[3]	Free Elective		3
			18	**18**
		THIRD YEAR		
MAJOR	MGT ELECT[4]	Mgt. Elective		3
MAJOR	MGT ELECT[4]	Mgt. Elective		3
BUS CORE	MGT 351-352	Principles of Management I-II	3	3
BUS CORE	MKT 351-FIN 351	Intro. to Marketing-Intro. to Finance	3	3
BUS CORE	OIM 351-OIM 352	Intro. to Mgt. Science-Intro to Oper Mgt.	3	3
BUS CORE	ECO 351/IB 351	Environment of Intl. Business	3	
GE PHIL-T/RS	PHIL-T/RST ELECT	Philosophy or T/RS Elective	3	
			15	**15**
		FOURTH YEAR		
MAJOR	MGT ELECT[4]	Mgt. Electives	3	3
MAJOR	MGT ELECT	Mgt. Electives	3	3
BUS CORE	MGT 455	Business Policy & Strategy	3	
BUS CORE	OIM 471	Business Information Management		3
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE ELECT	ELECT	Free Electives	3	6
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
			Total: 130-132 CREDITS	

[1] See note on Math Options on page 224.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

[4] In consultation with their advisor, management majors should choose two of the following four focus courses; MGT 361, 362, 460 or 461. MGT 361 and 362 focus more on people skills; MGT 460 and 461 focus more on organizational and administrative processes.

MGT 161 Staff
Intro to Business 3 credits
Nature, types and principles of business. Factors to consider in starting or choosing a business organization. Overview of business functions – finance, marketing, production, accounting, and management—in an analytical framework. Attention to business environment: legal, governmental, social and ethical. Enrollment is restricted to Associate Business Degree students. Non-Business students may take this course as a free elective with the permission of the dean of Dexter Hanley College.

MGT 210 Dr. Cann, Dr. Sebastianelli
Business and the Environment 3 credits
This is an interdisciplinary course designed to integrate management, marketing and operations management. This course will emphasize why environmental issues have become so central to corporate strategy and what approaches businesses can and are taking to respond effectively to environmental issues. It is designed to enable students from various disciplines (science, humanities, social sciences, business, education, etc.) to learn from each other without having had courses in business. It was developed for the Environmental Studies Concentration. Business majors may use this course only to fulfill a free elective.

MGT 251 Staff
Legal Environment of Business 3 credits
The nature, sources, formation, and applications of law. The judicial function, the court system, litigation and other methods of resolving disputes, legislation-law from judicial decisions, law by administrative agencies, regulation of business activity, antitrust law, consumer protection, environment, and pollution control. Substantive review of tort, criminal and insurance law. Full review of property rights for both personal and real property. Attention to business organization, principle of agency, partnership and corporation.

MGT 351 Staff
Principles of Management I 3 credits
(Prerequisite: junior standing) Survey course examines key aspects of organizations and their management, e.g., dynamic environments and their effects, organization design and structure, roles/functions of managers, managing technology and change, global management, and alternative types of organizations. This course examines the expanding role of the manager from the traditional areas of planning, organizing, controlling and directing to addressing current topics including issues of workplace diversity. Course will address the knowledge and skills that managers must develop in working with others who are different from themselves.

MGT 352 Staff
Principles of Management II 3 credits
(Prerequisite: MGT 351) Survey course examines the individual in the work setting, working with a variety of people inside and outside the organization. This course deals with such issues as motivation, leadership and communication diversity at the work place, and with individual effectiveness, interpersonal relations, and group skills.

MGT 361 Dr. Biberman, Staff
Human Resource Management 3 credits
(Prerequisite: MGT 351) This course will describe and explain the preparation of job descriptions, demographics of labor resources, recruitment policies, interviewing techniques, hiring contracts, aptitude testing and performance evaluation, labor turnover and labor mobility, employee morale, complaints and grievances, disciplinary procedures, employee health and safety, wage and hour administration, and government regulations relating to labor. The handling of absenteeism, alcoholism, drug addiction and other functional duties of a human resource department will also be covered. (MGT 361 and EMT 463 are offered jointly.)

MGT 362 Dr. Goll, Staff
Employee-Management Relations 3 credits
(Prerequisite: MGT 351) This course will focus on employee-management practices in contemporary society. It examines the employee participation in unions and their spill-over effect on nonunion settings. Course topics include unions, the collective-bargaining process, wages and benefits, seniority, grievance procedures, and arbitration. Discrimination in employment and equal-employment opportunity will be discussed, as well as future issues in union and nonunion settings and international employee-management relations.

MGT 455 Drs. Brumagim, Goll, Tischler
Business Policy and Strategy 3 credits
(Prerequisites: Senior standing, FIN 351, OIM 352, MGT 352, MKT 351) This is the capstone course for all Business majors. Concepts and skills developed in the prerequisite courses are integrated and applied to the overall management of an organization. Topics will include setting objectives, designing strategic plans, allocating resources, organizational structuring and controlling performance.

MGT 460 Dr. Goll, Staff
Organization Theory 3 credits
(Prerequisite: MGT 351) Study of the forces both within and outside the organization that determine the structure and processes of an organization. Topics to be covered will include technology and size-influences, conflict, boundary roles, matrix structure, political factors, and sociotechnical systems.

MGT 461 Dr. Tischler
Managing Through Systems and Quality 3 credits
(Prerequisite: MGT 351) Systems theory provides a powerful way to understand work organizations: as interacting, interdependent systems. Managing effectively through systems also involves working with vision, with empowered, growing people, with a customer orientation, with good measures and analysis, and with a continuous improvement culture. These approaches (also called quality management) appear to form the underpinning of tomorrow's management practices and can yield amazing business results. They can be done in ways that enhance life for all who are involved. This course will focus on these managerial ideas and approaches.

MGT 462 Dr. Brumagim, Staff
Project Management in Organizations 3 credits
(Prerequisite: MGT 351) This course will examine advanced project-management concepts from all phases of the project lifecycle (from requirements-specification through post-project assessment). Special emphasis will be placed on understanding projects within the context of complex organizational settings by utilizing an open-systems perspective. Linkages with more permanent administration structures within the organization will be reviewed. Finally, the effect of current management trends (such as total-quality management) on project management will be discussed. (MGT 462 and OIM 462 are offered jointly.)

MGT 471 Drs. Biberman, McKeage
Group Dynamics 3 credits
(Prerequisite: MGT 351 or permission of instructor) Survey and analysis of constructs, research and applications of small group phenomena in an organizational context. Examines the various theories, research measurements and observational methods used in studying groups. Students will be able to explore their own behavior in groups by participating in various groups and/or by observing others in group experiences. The course will prepare students to be effective in groups.

MGT 472 Staff
Women and Men in Management 3 credits
(Prerequisite: MGT 351) This course explores the opportunities for women in management as well as the special skills and insights needed by women in order to take full advantage of such opportunities. It will focus on the effects of having men and women acting as colleagues in the workplace and discuss the problems which may ensue. The course will prepare both men and women for the gender issues which can affect managerial performance. Topics to be covered include sexual harassment, the dual-career family and male/female socialization.

MGT 473 Staff
Organizational Social Responsibility 3 credits
(Prerequisite: MGT 351 or permission of the instructor) This course is designed to introduce students to basic concepts which underlie the social responsibility aspect of the management process. The role of pluralism is examined in the societal system to provide an understanding of the evolving relationship between organizations and society as a whole. The essential nature of the managerial approach is explored in the light of the increasing importance of societal impact on the organization.

MGT 474 Dr. Biberman
(D)Managing a Multicultural Workforce 3 credits
This course addresses the skills and knowledge managers must develop in dealing with the opportunities and challenges of an increasingly culturally diverse workforce. Specific topics to be covered include diversity in ethnicity, nationality, religion, culture, gender, age, sexual orientation and disability. The course will help students understand the social and other processes experienced by people in the work force as they interact and work with people different from themselves. It will also help students understand their own cultural values, biases and behaviors.

MGT /IB 475 Dr. Chowdhury, Staff
International Management 3 credits
(Prerequisites: ECO 351, MGT 351) Designed as an advanced-level undergraduate course in international business. Focuses on functional strategies of multinational corporations (MNCs), structure- and control-systems of MNCs, and comparative management. The specific MNC strategies to be covered include entry, sourcing, marketing, finance, human resources and public affairs. The study of structure and control systems delves into issues such as corporate structure, headquarters-subsidiary relationships. Study of comparative management systems focuses on nature of management systems and practices in different cultures. Projected as a mainly case-oriented course.

MGT 495 Dr. Cann
European Business Experience 3 credits
(Prerequisites: MGT 351, MKT 351, ECO/IB 351) Students who participate in this course will experience first-hand how business is conducted in Europe. Students will haave an opportunity to participate in lecture-discussion sessions with top-level executives from various multinational corporations, local business firms, and government agencies in a number of different countries in Europe. Participants will gain a basic understanding of the issues prominent in international business today and experience the cultural, social and political environments of some of Europe's most interesting cities. Course involves travel to Europe. (MGT 495, MKT 495, and IB 495 are offered jointly.)

MARKETING

DR. GERALD BIBERMAN, Chairperson

Marketing is "people-oriented," focusing on the interaction between the firm and its market (buyers). The marketer explores major needs to develop new products and to position them so that buyers see their relevance. Marketing majors are introduced not only to the visible marketing tools: products, salespeople, and the various selling and promotional techniques, but also to less visible marketing functions: marketing research and the firm's interactions with wholesalers and retailers. The student will develop both the quantitative and qualitative skills needed to succeed in a real business environment.

MARKETING

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
GE S/BH	ECO 153-154	Prin. of Micro-Macro Economics	3	3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy		3
GE PHIL-T/RS	T/RS 121	Theology	3	
GE C/IL	C/IL 104	Computing and Information Literacy		3
GE QUAN	MATH ELECT[1]	Math Option-2 courses	3-4	3-4
GE HUMN	HUMN ELECT[2]	Humanities Elective	3	
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			16-17	**16-17**
		SECOND YEAR		
BUS CORE	ACC 253-254	Financial-Managerial Accounting	3	3
BUS CORE	STAT 251-252	Statistics for Business I-II	3	3
BUS CORE	MGT 251	Legal Environment of Business	3	
GE PHIL-T/RS	PHIL 210	Ethics	3	
GE PHIL-T/RS	T/RS 122	Theology II		3
GE NSCI	NSCI ELECT	Natural-Science Electives	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT[3]	Free Elective		3
			18	**18**
		THIRD YEAR		
MAJOR	MKT 361	Marketing Research		3
MAJOR	MKT 362	Consumer Behavior		3
BUS CORE	MKT 351-FIN 351	Intro. to Marketing-Intro. to Finance	3	3
BUS CORE	MGT 351-352	Principles of Management I-II	3	3
BUS CORE	OIM 351-OIM 352	Intro. Mgt. Science-Intro. Oper. Mgt.	3	3
BUS CORE	ECO/IB 351	Environment of Intl. Business	3	
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
			15	**15**
		FOURTH YEAR		
MAJOR	MKT 470-476	Mkt. Communications-Mkt Strategy	3	3
MAJOR	MKT ELECT	Mkt. Electives	3	3
BUS CORE	MGT 455	Business Policy & Strategy	3	
BUS CORE	OIM 471	Business-Information Management		3
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE ELECT	ELECT	Free Electives	3	6
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
			Total:	**130-132 CREDITS**

[1] See note on Math Options on page 224.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

MKT 351 Staff
Introduction to Marketing 3 credits
(Prerequisites: junior standing, ECO 153-154 or ECO 101) This course introduces the student to the field of marketing. An overview of the principles on which the discipline is founded. The marketing concept is presented as the framework under which the decisions related to marketing-mix variables (product, place, price and promotion) are made by organizations.

MKT 361 Dr. Chattopadhyay, Staff
Marketing Research 3 credits
(Prerequisite: MKT 351) Study of the role of marketing information as the basis for decision-making. Topics include research design, methods of gathering data, questionnaire structure, interviewing methods and preparing the final report.

MKT 362 Staff
Consumer Behavior 3 credits
(Prerequisite: MKT 351) Study of theories of consumer behavior. The buyer is analyzed at the individual level in terms of motivation, attitudes, etc. and at the social level in terms of influence on buying behavior from the socio-economic environment.

MKT 370 Drs. Aych, Cattopadhyay
Interactive Marketing 3 credits
(Prerequisite: MKT 351, junior standing) This course focuses on the integration of state-of-the-art interactive technologies in the design and implementation of marketing programs. The functions of market identification benefit immensely from the capabilities of the rapidly developing information technology (IT) infrastructure. (MKT 370 and EC 370 are offered jointly.)

MKT 460 Staff
Customer Support Systems 3 credits
(Prerequisites: EMT 351, MKT 351) An interdisciplinary approach to enterprise management that focuses on the customer is emphasized. The objective of the course is to orient enterprise-wide decisioin making to successful customer-relationship management on an ongoing basis. (MKE 460 and EMT 460 are offered jointly.)

MKT 470 Dr. Zych, Staff
Marketing Communications 3 credits
(Prerequisite: MKT 351) Personal and mass communication approaches generated by manufacturers and intermediates or institutions toward target markets. The design of advertising campaigns to shift consumer attitudes, to secure resellers' support and to inform, persuade, and move them to action. Development of copy selection and media and measurement of promotion effectiveness including evaluation of sales force.

MKT 471 Dr. Sumrall
Sales Force Management 3 credits
(Prerequisites: MGT 352, MKT 351) This course develops the concepts and techniques needed to identify and analyze the various decision areas faced by a sales-force manager. Topics include recruiting, selecting and training the sales force; forecasting, budgeting and sales quotas; assigning, motivating and compensating the sales force.

MKT 472 Dr. Sumrall
Retailing Management 3 credits
(Prerequisites: MGT 352, FIN 351, OIM 351) This course focuses on the decision areas facing retail managers, including retailing, structure, merchandising, locations, store layout, promotion, pricing and personnel.

MKT/IB 475 Dr. Chattopadhyay
(D)International Marketing 3 credits
(Prerequisites: MKT 351, ECO 351) Analysis of marketing strategies of multinational corporations with emphasis on the internal environment of country markets. Discussions include comparisons of different regional markets along socio-economic, political and cultural lines; different types of international market barricades and corresponding market-entry strategies.

MKT 476 Staff
Marketing Strategy 3 credits
(Prerequisite: MKT 351) The theme of this course is building effective marketing strategies through integrated decision-making. Emphasis is on different decision models within functional areas such as demand analysis, consumer research, product and promotion management, etc.

MKT 495 Dr. Cann
European Business Experience 3 credits
(See description under IB 495)

OPERATIONS AND INFORMATION MANAGEMENT

DR. PRASADARAO KAKUMANU, Chairperson

Operations and Information Management is primarily concerned with the effective management of production and operations systems in manufacturing and service organizations. Career opportunities include:

Manufacturing		Services	
V.P. Manufacturing	Plant Manager	V.P. Operations	Store Manager
Production Manager	Quality Control Manager	Operations Manager	Customer Service Manager
Materials Manager	Production Planning Analyst	Supplies Specialist	Warehouse Manager
Inventory Analyst	Purchasing Manager	Buyer or Purchasing Agent	Inventory Analyst
Warehouse Manager	Shipping Specialist		

MINOR: To minor in Operations Management, a student must take a minimum of 18 credits. Five courses are required: STAT 252, OIM 351, OIM 352, OIM 470 or EC 470, and OIM 471 plus one other OIM course.

OPERATIONS MANAGEMENT

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FIRST YEAR		
GE S/BH	ECO 153-154	Prin. of Micro-Macro Economics	3	3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy		3
GE PHIL-T/RS	T/RS 121	Theology I	3	
GE C/IL	C/IL 104	Computing and Information Literacy		3
GE QUAN	MATH ELECT [1]	Math Option-2 courses	3-4	3-4
GE HUMN	HUMN ELECT [2]	Humanities Elective	3	
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1	1
			16-17	**16-17**
		SECOND YEAR		
BUS CORE	ACC 253-254	Financial-Managerial Accounting	3	3
BUS CORE	STAT 251-252	Statistics for Business I-II	3	3
BUS CORE	MGT 251	Legal Environment of Business		3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	ELECT[3]	Free Elective	3	
			18	**18**
		THIRD YEAR		
MAJOR	OIM 353	Business Process Overview	3	
MAJOR	OIM 363	Total Quality Management	3	
BUS CORE	MGT 351-352	Principles of Management I-II	3	3
BUS CORE	MKT 351-FIN 351	Intro. to Marketing-Intro to Finance	3	3
BUS CORE	OIM 351-OIM 352	Intro. to Mgt. Science-Intro. to Oper Mgt.	3	3
BUS CORE	ECO/IB 351	Environment of Intl. Business		3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
			15	**15**
		FOURTH YEAR		
MAJOR	OIM 470	Production Planning and Control	3	
MAJOR	EC 470	Supply Chain Management		3
MAJOR	MAJOR ELECT	Major Electives	3	3
BUS CORE	MGT 455	Business Policy & Strategy	3	
BUS CORE	OIM 471	Business Information Management		3
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE ELECT	ELECT	Free Electives	3	6
GE PHED	PHED ELECT	Physical Education	1	1
			16	**16**
			Total: 130-132 CREDITS	

[1] See note on Math Options on page 224.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

[4] Major Electives - Two OIM courses, EC 472, or MGT 462

STAT 251 Drs. Gnanendran, Gougeon
(Q)Statistics for Sebastianelli, Staff
Business I 3 credits
(Prerequisite: MATH 107 or 114) Detailed coverage of descriptive statistics. An introduction to the elements of probability theory (including Bayes's theorem) and decision theory, and index numbers. The major discrete and continuous probability distributions are covered with an emphasis on business applications. Data analysis will be done using appropriate software.

STAT 252 Drs. Gnanendran, Gougeon
(Q)Statistics for Sebastianelli, Staff
Business II 3 credits
(Prerequisite: STAT 251; corequisite: C/IL 104) A survey of inferential statistical methods covering sampling distributions, interval estimation, hypothesis testing, goodness-of-fit tests, analysis of variance, regression and correlation analyses, and non-parametric statistics. Data analysis will be done using appropriate software.

STAT 253 Drs. Gougeon, Kakumanu,
Statistics for Staff
Economics 3 credits
(Prerequisite: MATH 107 or 114) Coverage of statistical tools to analyze economic data. Topics include measures of central tendency, dispersion, probability distributions, index numbers, time series analysis, regression and correlation, and analysis of variance. Data analysis will be done using appropriate software.

OIM 351 Drs. Chien, Cunningham,
Introduction to Gnanendran, Tamimi
Management Staff
Science 3 credits
(Prerequisites: junior standing, C/IL 104, STAT 251) A survey of the quantitative techniques which are used by modern managers. Topic coverage focuses on model building, linear programming methods, queuing models, project management and simulation. Emphasis is placed on the use and limits of these quantitative methods. Model analysis will be done using appropriate software.

OIM 352 Drs. Chien, Cunningham,
Introduction to Gnanendran, Tamimi
Operations Staff
Management 3 credits
(Prerequisites: OIM 351, STAT 252) A functional view of how to manage the activities involved in the process of converting or transforming resources into products or services. Topics include an overview of strategic decisions, forecasting, product design, process planning, facility layout, basic inventory models, capacity planning, aggregate planning and scheduling.

OIM 353 Staff
Business Process Overview 3 credits
This is the first course in the area of Enterprise Management. Its main goal is to help students study and appreciate the integration of a company's core business process. Students will be exposed to the main business processes that drive an organization, the interactions within and between them, and the effect of integration on the decision-making environment. As major tools for demonstrating business process integration and closely related issues such as business process re-engineering, this course uses an enterprise-wide integrated information systems software and simulated data for a model company. (OIM 353 and EMT 351 are offered jointly.)

OIM 363 Drs. Sebastianelli, Tamimi
Total Quality Staff
Management 3 credits
(Prerequisite: STAT 252) The philosophy of Total Quality Management (TQM) and issues concerning its implementation are studied, covering the approaches of well-known leaders in the field, e.g., Deming. Topics include employee empowerment, quality-improvement tools, cross-functional teams, leadership for quality, statistical-process control, process capability, Taguchi methods, ISO 9000 standards, and the role of inspection in TQM.

OIM 366 Dr. Cattopadhay
Supply Chain Management 3 credits
(Prerequisite: OIM 471 or permission of the instructor) This course integrates two powerful trends that are critical management imperatives: Supply Chain Management & Electronic Business. The students will learn how the principles of supply-chain management integrate into the "real-time" environment of E-business and examine case studies of such implementations. Latest software and technology will be discussed and examples demonstrated on the SAP R/3 platform available at KSOM. (OIM 366 and EC 470 are offered jointly.)

OIM 462 Dr. Brumagim Staff
Project Management in in Organizations 3 credits
(Prerequisite: MGT 351) This course will examine advanced project-management concepts from all phases of the project lifecycle (from requirements-specification through post-project assessment). Special emphasis will be placed on understanding projects within the context of complex organizational settings by utilizing an open-systems perspective. Linkages with more permanent administration structures within the organization will be reviewed. Finally, the effect of current management trends (such as total quality management) on project management will be discussed. (OIM 462 and MGT 462 are offered jointly.)

OIM 470 Drs. Chien, Gnanendran, Staff
Production Planning and Control 3 credits
(Prerequisite: OIM 352) This course is concerned with the study of production planning and control activities in an enterprise resource-planning context. Topics include aggregate planning, capacity planning, master production scheduling, material requirements planning, production activity control, purchasing, inventory models, and Just-in-Time systems. A particular focus of this course will be the interactions between operations and the other functional areas of the business.

OIM 471 Drs. Kakumanu, Prattipati, Tamimi, Staff
Business Information Management 3 credits
(Prerequisite: C/IL 104) Computers and how they can be applied to the operations and management of business firms. Topics include data-processing concepts, overviews of computer hardware and software, modern data- and information-processing systems, applications of computers in business, acquiring and managing of computer and information resources. Software packages will be used to gain hands-on experience.

OIM 472 Dr. Prattipati
Electronic Business and Entrepreneurship 3 credits
(Prerequisites: EC 361, EC 362) This course links E-commerce with entrepreneurship. The convergence of information and communication technologies has created numerous opportunities to entrepreneurs to start new and innovative businesses based on electronic commerce. It examines the issues related to the starting and establishment of new businesses based on E-commerce. The course comprises three parts. The first part focuses on issues related to the establishment of a new business and entrepreneurship. The second part examines the business issues related to E-commerce, including the development of business models and plans. In the last part, students will develop and establish small E-commerce businesses from start to finish. (OIM 472 and EC 472 are offered jointly.)

OIM 473 Drs. Kakumanu, Prattipati, Staff
Business Applications of Communication Networks 3 credits
(Prerequisite: OIM 471) Use of computer and telecommunication networks to achieve organizational goals. Topics include data communications; planning and design of communication networks; data integrity, independence and security; client-server computing; global communication; the internet; applications of telecommunication networks and current issues and future trends. (OIM 473, EC 473, and AIS 483 are offered jointly.)

The Panuska College of Professional Studies

The Panuska College of Professional Studies (CPS) prepares students in a wide range of professions, principally in allied health and education. The College has been designed with the conviction that all disciplines should be taught and understood through a balance of theory and practice. An exclusively theoretical understanding of a discipline is incomplete. Practice for which there is no understood context is of limited value. It is this belief that structures the College's pedagogy and curriculum. CPS students receive exemplary preparation for the profession of their choice, and a solid education in the liberal arts and sciences. In addition, students perform community service annually as a requirement for graduation. In this way, the service aspects of their prospective careers can be understood in personal and comprehensible terms. Such an ethic has roots in antiquity, is Catholic and Jesuit in tradition and spirit, and responsive to contemporary needs. All of the College's programs are accredited by the appropriate professional organizations.

COUNSELING AND HUMAN SERVICES

DR. OLIVER J. MORGAN, Chairperson
DR. ANN MARIE TOLOCZKO, Director of Human Services

The Human Services curriculum is designed to develop in students the values, knowledge and skills necessary to work with people in a variety of settings and situations. The sequence of courses focuses on understanding normal and abnormal human adjustment across the lifespan and on developing skill in interventions designed to maximize human adjustment and development. Core requirements in the major emphasize values, knowledge and skills common to all fields of human services, while electives allow students to develop competence in assisting specific populations. A three-credit, 120-hour internship experience is required of all majors, with a second, three-credit internship available as an elective.

Students must maintain a minimum grade of C in all major courses and cognate courses, and full-time students must complete a minimum of ten hours of community service during each fall and spring semester registered as a Human Services major. Dexter Hanley College students will meet the service-learning requirement by completing major courses that have a service-learning component. They will not be required to complete additional service-learning hours.

The curriculum is geared toward students who have high social-science interests as well as general scientific interest and aptitude in the social and behavioral sciences. The curriculum prepares students for entry-level positions in a variety of human-services positions in private or public settings, or for graduate study in counseling, social work, or related social or behavioral-science professions.

Recent graduates have pursued Master's degrees in social work; community, rehabilitation or school counseling; occupational therapy; art therapy; human resources administration; audiology and law. They have attended the University of Pennsylvania, Fordham University, New York University, Rutgers, Hunter College, Adelphi University and the University of Maryland.

Concentration in Rehabilitation Services: The Human Services Program has expanded to offer a concentration in rehabilitation services to enhance the knowledge and practice for work with persons with disabilities in response to an increasing need for baccalaureate-level professionals in rehabilitation services. Through a concentration in rehabilitation services, students will be prepared to work in state and local agencies which are responsible for the vocational, mental-health, job-development and coaching, and related needs of persons with disabilities. Included in this concentration can be an emphasis on persons with addiction and substance-abuse disabilities. This concentration is for Human Services majors only.

Combined Baccalaureate/Master's Program: outstanding Human Services majors are eligible for consideration in this program (please refer to the catalog sections on Special Programs or The Graduate School and to the Graduate School Catalog for specifics of the program). Community Counseling, Rehabilitation Counseling and School Counseling are graduate programs available for students of high academic quality and clear professional goals. Each graduate program is nationally accredited and the department of Counseling and Human Services is recognized regionally and nationally in Counselor Education. Three faculty received the Outstanding Counselor Educator Award for the state of Pennsylvania.

MINOR. A minor in Human Services requires HS 111, 112, 241, 242, 341, and one HS elective course.

HUMAN SERVICES

	Dept. & No.	Descriptive Title	Credits FALL	SPRING
		FIRST YEAR		
MAJOR	HS 111	Intro. to Human Adjustment	3	
MAJOR	HS 112	*Human Service Systems		3
COGNATE(GE S/BH)	PSYC 110	Fundamentals of Psychology		3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE PHIL-T/RS	PHIL 120-T/RS 121	Intro Philosophy-Theology I	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE FSEM	INTD 100	*Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			16	**16**
		SECOND YEAR		
MAJOR	HS 241	*Case Mgt. and Interviewing	3	
MAJOR	HS 242	Counseling Theories		3
MAJOR	HS 293	Research Methods		3
GE S/BH	PSYC 221	Childhood and Adolescence	3	
COGNATE	PSYC 222	Adulthood and Aging		3
GE QUAN	QUAN ELECT	Elective	3	
GE PHIL-T/RS	PHIL 210-T/RS122	Ethics-Theology II	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
			18	**18**
		THIRD YEAR		
MAJOR	HS 333	*Multiculturalism in H.S.	3	
MAJOR	HS 340	Career Seminar	1	
MAJOR	HS 341	*Group Counseling	3	
MAJOR	HS 380	Internship		3
MAJOR	HS ELECT	Human Services Electives	6	6
COGNATE	S/BH ELECT	Social/Behavioral Electives	3	3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
GE PHED	PHED ELECT	Physical Education	1	1
			17	**16**
		FOURTH YEAR		
MAJOR	HS 441	*Crisis Intervention	3	
MAJOR	ELECT	Human Services Electives		3
COGNATE	S/BH ELECT	Social/Behavioral Electives	6	6
GE ELECT	FREE ELECT	Free Electives	6	6
			15	**15**
			Total: 131 CREDITS	

*Service-learning course

To avoid duplication of course content, Human Services majors should not take PSYC 225 (Abnormal Psychology), PSYC 224 (Personality), PSYC 330 (Research Methods), or PSYC 360 (Clinical Psychology). Students who wish to declare a double major or a minor in Psychology should consult their advisor.

HUMAN SERVICES CONCENTRATION IN REHABILITATION SERVICES

	Dept. & No.	Descriptive Title	Credits FALL	SPRING
		FIRST YEAR		
MAJOR	HS 111	Intro. to Human Adjustment	3	
MAJOR	HS 112	*Human Service Systems		3
GE S/BH	PSYC 110	Fundamentals of Psychology		3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE PHIL-T/RS	PHIL 120-T/RS 121	Intro Philosophy-Theology I	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE FSEM	INTD 100	*Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			16	**16**
		SECOND YEAR		
MAJOR	HS 241	*Case Mgt. and Interviewing	3	
MAJOR	HS 242	Counseling Theories		3
MAJOR	HS 293	Research Methods		3
COGNATE(GE S/BH)	PSYC 221	Childhood and Adolescence	3	
COGNATE	PSYC 222	Adulthood and Aging		3
GE QUAN	QUAN ELECT	Elective	3	
GE PHIL-T/RS	PHIL 210-T/RS122	Ethics-Theology II	3	3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
			18	**18**
		THIRD YEAR		
MAJOR	HS 333	*Multiculturalism in H.S.	3	
MAJOR	HS 340	Career Seminar	1	
MAJOR	HS 341	*Group Counseling	3	
MAJOR	HS 342	Foundations of Rehabilitation	3	
MAJOR	HS 343	Med. & Psychosoc. Aspects of Disability		3
MAJOR	HS 344	Vocational Education		3
MAJOR	HS ELECT	Human Services Electives	3	6
COGNATE	S/BH ELECT	Social/Behavioral Elective	3	
GE ELECT	FREE ELECT	Free Elective		3
GE PHED	PHED ELECT	Physical Education	1	1
			17	**16**
		FOURTH YEAR		
MAJOR	HS 440	Job Development	3	
MAJOR	HS 441	*Crisis Intervention	3	
MAJOR	HS 480	Internship in Rehabilitation Services		3
MAJOR	HS ELECT	Human Services Electives	3	3
MAJOR	HS ELECT	Human Services Electives	3	3
COGNATE	S/BH ELECT	Social/Behavioral Electives	3	3
GE ELECT	FREE ELECT	Free Electives		3
			15	**15**
			Total:	**131 CREDITS**

* Service-learning course.

To avoid duplication of course content, Human Services majors should not take PSYC 225 (Abnormal Psychology), PSYC 224 (Personality Theories), PSYC 330 (Research Methods), or PSYC 360 (Clinical Psychology).

HS 001 Staff
Residence Life: Theory and Practice 0 credits
Introduction to Resident Assistant position on the University of Scranton residence-life staff. Communication skills, conflict resolution, crisis intervention and referral, development of community in a residence facility, and the personal development of RAs as staff members will be stressed. Enrollment limited to resident assistants. Not recommended for academic credit.

HS 111 Staff
(S)Introduction to Human Adjustment 3 credits
Introduction to human adjustment throughout the lifespan. Focuses on discrimination of normal and abnormal behavioral and emotional responses to developmental life stages and to common developmental concerns.

HS 112 Staff
***Human-Services Systems** 3 credits
Examines the human-services systems and institutions which have evolved as a response to human need. Explores both the effect of social problems on individuals and families and the service systems designed to alleviate such problems.

HS 241 Staff
***(D)Case Management and Interviewing** 3 credits
The role of the human-service professional as a case manager or coordinator of services is examined. Initial interviewing skills and techniques are discussed with an emphasis on case conceptualization, problem identification, goal selection, evaluation, and follow-up.

HS 242 Staff
Counseling Theories 3 credits
The role of the human-services professional as an individual counselor or caseworker is examined. Theories and techniques as well as problems in individual counseling are explored.

*Includes service-learning component

HS 284 Staff
Special Topics 3 credits
Courses developed to provide in-depth coverage of specific topics in human services. Course title will be provided in advance of registration. May be used only twice to satisfy major or minor elective requirement.

HS 293 Staff
(W)Research Methods in Human Services 3 credits
An introduction to research methodology as applied to problems in human-services agencies and settings. Specific topics include descriptive, experimental, and quasi-experimental research methods. Emphasis is placed on development of the student's ability to be a critical consumer of research in human services.

HS 321 Staff
Physical Disabilities 3 credits
Selected physical conditions and/or disabling conditions are examined with particular emphasis on body systems involved, treatment possibilities, residual function limitations, and psychological impact of each condition.

HS 322 Staff
Cognitive Disabilities 3 credits
Etiology, assessment, diagnosis, treatment, and prevention of cognitive disabilities are presented. This course examines both student and societal beliefs concerning persons with cognitive disabilites. The implications of living with cognitive disabilities will be explored and the impact of disability culture as a means to facilitate the empowerment of children and adults with cognitive disabilities will be presented.

HS 323 Staff
Psychiatric Rehabilitation 3 credits
An examination of the problems associated with mental and emotional disturbances. Emphasis is placed on contemporary modalities of rehabilitation as they relate to community mental-health programs, and innovative non-medical treatment approaches. Critical issues in mental health will be discussed.

HS 331 Staff
Health and Behavior 3 credits
Focuses on stress which affects thoughts, emotions, and the body. Stress diseases of adaption include cancer, Type A Behavior, GI tract disorders along with stress-related thought disorders and emotional disturbances. Students learn to apply relaxation, cognitive restructuring and record-keeping in the treatment of their own as well as others' health.

HS 332 Staff
Career Development 3 credits
Explores theories of career choice and adjustment. Emphasis will be placed upon methods and resources for facilitating career development throughout the lifespan. Career education, computerized information systems, and decision-making methods will be considered along with innovative approaches for placement of special-needs populations.

HS 333 Staff
***(D)Multiculturalism in Human Services** 3 credits
Focuses on current social and cultural issues in human services and related fields. Human development in a multicultural society will be examined and the basic objectives and dimensions of multicultural intervention will be defined. Student self-awareness of values, attitudes, and beliefs will be emphasized.

HS 334 Staff
Marital and Family Counseling 3 credits
Theories of family counseling will be presented with specific attention to the structural and strategic approaches. A variety of family-counseling techniques and stages will be learned through the use of role play and videotaping. The utilization of family counseling will be discussed. (Also listed as HD 234.)

*Includes service-learning component

HS 335 Staff
Administration in Human Services 3 credits
Focuses on the development of skills and knowledge related to program and organizational development, and community-wide planning in human services. Topics include organizational theory applied to human-service settings, consultation, supervision, planning, funding and training.

HS 336 Staff
Recreational Therapy 3 credits
Designed to develop an understanding of purpose, organization, administration and delivery of recreational-therapy services for the handicapped.

HS 337 Staff
(W, D) Counseling Girls and Women 3 credits
This course is designed to explore the topic of counseling girls and women in a sociocultural, historical, and multicultural context. Through the examination of the history of women, contemporary theories of girls' and women's psychological development (e.g. social construction of gender, identity) from a self-in-relation foundation, and feminist counseling and psychotherapy and its role in de-pathologizing the importance of relationships to girls and women.

HS 340 Staff
Career Seminar 1 credit
(Majors only; prerequisite for HS 380) Designed to introduce the student in the Human Services curriculum to counseling, human development and human-services occupations. Short- and long-term goals are examined in preparation for employment or further study.

HS 341 Staff
***Group Dynamics** 3 credits
A basic understanding of group dynamics and individual behavior in groups is presented. Methods of developing and organizing group programs are stressed. Students participate in a group experience.

HS 342 Staff
Foundations of Rehabilitation 3 credits
Students will develop sensitivity, appreciation and understanding of what it means to have a disability. Topics covered will include federal, state and community mandates for the rehabilitation of persons with disabilities, independent-living concepts, and the basic principles of rehabilitation. A comprehensive review will occur of the variety of rehabilitation programs across the public, private non-profit and private for-profit settings. Ethical decision-making will be integrated into the course and students will learn to practice with cultural sensitivity. Site visits to rehabilitation agencies and applied experiences will be provided.

HS 343 Staff
Medical and Psychosocial Aspects of Disabilities 3 credits
Students will acquire knowledge and understanding of the medical, functional and psychosocial aspects of a wide array of disabilities. The emphasis will be holistic and person-centered. Curriculum components include learning medical terminology, the use of medical information, identification and discussion of psychosocial aspects of disability, and the impact, identification and resolution of attitudinal and environmental barriers. Students will have the opportunity to interact with persons with disabilities.

HS 344 Staff
Vocational Evaluation 3 credits
This course focuses on the theme of assessment and employment of individuals with disabilities. Students will discover the impact of the Rehabilitation Act Amendments of 1998 and the ADA on employment concerns of persons with disabilities. Students will compile and utilize assessment information such as prior records, test results, work samples and situational assessment.

HS 380 Staff
Internship in Human Services 3 credits
(Prerequisite: HS 340) The internship is a significant clinical and educational experience that ends the third year of academic experience and involves a supervised practical experience in a community agency providing human services. It provides both a practical experience in the student's field and an opportunity to integrate knowledge from a variety of courses into a working professional philosophy. Students will spend a minimum of 120 hours in the field placement and a minimum of 18 hours in on-campus staffing sessions. A semester project is required. Offered only during the spring semester; prerequisite for HS 481. Graded Satisfactory (S) or Unsatisfactory (U).

HS 421 Staff
Addictions 3 credits
Physical, social and psychological aspects of addiction: biochemical, nutritional, psychodynamic, and behavioral approaches to assessment, treatment, and prevention of addiction. Emphasis is on drug abuse and alcoholism.

HS 422 Staff
Substance-Abuse Education 3 credits
Design, implementation, and evaluation of substance-abuse education and prevention programs.

HS 423 Staff
Legal and Health Aspects of Substance Abuse 3 credits
Legal and health consequences of substance abuse are examined. Special attention is given to the role of the substance-abuse specialist in relationship to health care and legal systems.

HS 440 Staff
Job Development 3 credits
An awareness of the changing world of work will be the backdrop for job analysis, labor-market surveys; vocational adjustment, job development and job placement will be addressed. Students will be exposed to both traditional and current models of employment for individuals with disabilities. Coordination of services with collaborating agencies (e.g., social, education, financial, vocational, legal, transportation and housing) will be included. Rehabilitation technology and adapted computer applications will be emphasized.

HS 441 Staff
***Crisis Intervention** 3 credits
Theory and practice of crisis intervention as applied to common crisis situations such as suicide, battering, violent behavior, post-traumatic stress disorder, substance abuse, sexual assault, and personal loss.

HS 480 Staff
Internship in 3 credits
Rehabilitation Services
(Prerequisite: HS 340) The internship is specifically designed for students in the Rehabilitation Services concentration. It is a significant clinical and educational experience that ends the fourth year of academic experience. Students will spend a minimum of 150 hours in their field placement and a minimum of 18 hours in on-campus staffing/supervision sessions. The internship provides a practical experience in the rehabilitation field and an opportunity to integrate course knowledge into a working professional philosophy. A semester project may be required. The internship will be offered in the spring semester of the student's fourth year. Graded Satisfactory (S) or Unsatisfactory (U).

*Includes service-learning component

HS 481 Staff
Internship in Human Services 3 credits
(Prerequisite: HS 380) This second internship in Human Services involves 150 hours in a community agency or organization providing human services. It allows the student to follow-up on the experiences obtained during the first internship or to explore a different type of organization or experience within an organization. There is no on-campus staffing requirement. A semester project may be required. This internship may be taken during any regular academic semester including intersession and summer and may be completed outside of the immediate University region. Approval by program director is required. Graded Satisfactory (S) or Unsatisfactory (U).

EDUCATION

DR. DAVID A. WILEY, Chairperson
DR. KATHLEEN K. MONTGOMERY, Director, Basic Certification Programs

The Department of Education endeavors to contribute to the improvement of education by preparing informed, inquiring, and skilled professionals who, as scholars and decision-makers, are prepared for positions in the educational community. More specifically, the department aims to provide persons with a breadth and depth of knowledge and understanding in their specialized areas of professional practice and to provide training to ensure competence in the specific area of functioning. To this end, individual program competencies have been developed. Additionally the Department endeavors to offer opportunities for continued professional growth to practicing educators, to assist in the educational growth and development of the community served by the University, and to foster the advancement of knowledge through research in education.

The Department of Education offers degrees in Early Childhood, Elementary and Special Education, each leading to certification. Secondary Education concentrations lead to certification in:

Biology	English	German	Physics
Chemistry	French	Latin	Social Studies
Communication	General Science	Mathematics	Spanish

Elementary Education leads to state certification (Pennsylvania, K-6) and Early Childhood Education (pre-K-3).

The department's programs are accredited by the Pennsylvania Department of Education. The University's Professional Education Unit is also accredited by the National Council for Accreditation of Teacher Education. Accreditation and interstate agreements between Pennsylvania and selected states assure that courses taken will be considered for certification in most states. Praxis Series I & II tests are required for Pennsylvania Teacher Certification. Students are accepted to the University as Education Majors, but progress beyond 48 credits may occur only upon application. Materials necessary for the application process include teacher recommendations, completion of specific courses, and passing scores on the appropriate Praxis Series I tests as might be required by the Pennsylvania Department of Education. Completing the application process will admit the education major to Teacher Candidacy and permit the student to engage in Junior-level course work. Materials necessary for the application are available from the Education Department and the CPS Advising Center.

A student may enter the Secondary Education program either as a major in Education or as a major in an academic department with a second major in the Education Department. However, in both cases the student must be approved by the department and follow the prescribed courses if the student desires certification. Registration into Education Department courses numbered 230 and above are limited to majors or second majors in the programs of the Education Department. Exceptions require the expressed permission of the assistant dean and chair of the department. All aspects of the state-approved program must be completed to ensure recommendation for certification.

Double majors, including both a subject area and Education, may be arranged in the case of exceptional students. These must be approved by both departments involved and by the college dean. A specific program will be designed in each individual case. Double-certification programs may also be arranged with the approval of the appropriate program directors.

Education majors are evaluated regularly at a meeting of the Education Department faculty to assess each individual student's continuing potential to become a teacher. This determination is based on academic and personal qualities consistent with the competencies stated in *The Education Student Handbook* (available from the Education Department and in the Weinberg Memorial Library). The academic standard of the Education Department is established by the laws of the Commonwealth of Pennsylvania and the regulations of the Pennsylvania Department of Education. For first-year students entering the university in the academic year 2002-2003, the GPA standard is 2.80. This standard applies to each of three GPA calculations: 1) overall; 2) education major course only, and 3) teaching area courses. Additionally, a grade of "C" or better is required in all major and teaching-area courses to student-teach and to elicit a recommendation for certification. Students whose professional development is unsatisfactory are subject to departmental probation and may be recommended to the dean of the college for dismissal from the Education program. The department's probation policy and other information are presented in *The Education Student Handbook*. All Education majors are required to perform 10 hours of community service per academic year. The service hours for freshman, sophomore and junior Education majors are normally performed in a semester opposite the required field experience of that academic year. The service hours for senior education majors are performed as part of the students' professional development during their senior student-teaching experience. Secondary Education majors perform 20 hours of service in their freshman year and have no service requirement for their sophomore year.

Additionally, as a matter of University policy, all Education majors are required to submit a completed Act 34 clearance (and, in some cases, the Pennsylvania Child Abuse History Clearance) to the Education Department prior to being placed at any field experience site that would put them in direct contact with children. This clearance is collected by the University on behalf of the school entity wherein the field experience will occur. Completed clearances should be submitted with field-experience information forms required by the Director of Field Placement. In no case will a student be provided with placement information previous to the director's receipt of

the completed forms. The completed Act 34 form will be delivered to the school entity by the Education Department after the clearance form is obtained by the student. The University will not maintain a student's Act 34 clearance form or background check after delivery of the clearance form to the school entity wherein the field experience will occur.

Due to new Pennsylvania Department of Education mandated changes in teacher education programs as well as the continuing need to update our programs, the curricular requirements for all of the education programs are currently under revision. The following outline presents the criteria for admission into candidacy for certification after the student has completed at least 48 semester hours.

Education (Elementary, Early Childhood, Secondary, and Special)
Certification Candidacy Track
Admission to Teacher Education Programs
For Freshmen Entering on or after Fall 2002

1. Verification of at least 48 semester hours that include the required 6 semester hours of mathematics and the required 6 semester hours of English.

2. Verification of at least a 2.8 GPA or higher.

3. Official ACT 34/151 clearances.

4. Completion of the following courses with a minimum grade of C:

EDUC 121	Foundations of Education
EDUC 180	Field Experience I
EDUC 280	Field Experience II
ENLT 103	Children's Literature (Secondary Education majors may substitute any ENLT literature Course
WRTG 107	Composition

Three semester credit hours of mathematics that must include one of the following courses:*

MATH 204	Special Topics of Statistics
PSYC 210	Statistics in the Behavioral Sciences
EDUC 120	Applied Statistics
PS 240	Political Science Statistics
S/CJ 215	Statistics for the Social Sciences

Three semester credit hours of mathematics that must include one of the following courses:*

MATH 106	Quantitative Methods
MATH 201	Algebra and Environmental Issues

5. Passing scores on the Praxis Series I examinations.

6. Completed recommendations from faculty in the following courses:

EDUC 121	Foundations of Education
EDUC 180	Field Experience I
EDUC 280	Field Experience II

Freshman and sophmore students will confer with their Academic Advisors in order to plan the sequence of courses that will be taken for each term. Entering freshmen will be given the new program requirements prior to orientation. All the courses mentioned above will be a part of the new programs.

*Requirements may differ for students pursuing certification in mathematics or the sciences.

Federal regulations in the Higher Education Act of 1998 require that departments of teacher education report their students' performance on the Praxis Series examinations. An analysis of the results from the most recent academic year is available from the Chair of the Department of Education.

EARLY CHILDHOOD EDUCATION

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR	EDUC 121	Foundations of Education	3	
MAJOR	EDUC 180	Field Experience I	1	
COGNATE	ENLT 103	Children's Literature		3
GE QUAN	MATH 106-ELECT	*Quantitative Methods I-Stats Elective	3	3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition - Public Speaking	3	3
GE S/BH	PSYC 110	Fund. of Psychology	3	
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar - Physical Education	1	1
GE PHIL-T/RS	T/RS 121	Theology I		3
GE C/IL	C/IL 102	Computing & Information Literacy		3
			17	**16**
		SECOND YEAR		
MAJOR	EDUC 222	Educational Psychology	3	
MAJOR	EDUC 280-EDUC 241	Field Experience II-Fntns of Reading	1	3
COGNATE	EDUC 256-THTR 110	Family & Comm Rel-Intro to Theater	3	3
GE HUMN	HIST 110	History of the United States	3	
GE NSCI	PHYS 102	Earth Science	3	
GE PHIL-T/RS	PHIL 120-T/RS 122	Intro to Phil-Theology II	3	3
COGNATE	EDUC 251	Development of Early Learner		3
GE S/BH	PSYC 221	Childhood & Adolescence		3
GE ELECT	GEOG 134	World Reg. Geography		3
GE PHED	PHED ELECT	Physical Education	1	
			17	**18**
		THIRD YEAR		
MAJOR	EDUC 380	Field Experience III	1	
MAJOR	EDUC 356-EDUC 354	ECE LA/SS/ARTS-Math/Sci/Health	4	4
MAJOR	EDUC 363-EDUC 252	Special Learner-Assess in ECE	3	3
COGMNATE	EDUC 342-EDUC 343	Ed Media & Tech-Eval & Meas.	3	3
COGMNATE	EDUC 362-NURS 100	Psycholinguistics-Family Health	3	3
GE PHIL-T/RS	PHIL 210	Ethics	3	
GE NSCI	NSCI 201	Science in Human Environment		3
GE PHED	PHED ELECT	Physical Education	1	
			17	**17**
		FOURTH YEAR		
MAJOR	EDUC 440	**Professional Practice Seminar	3	
MAJOR	EDUC 456		2	
MAJOR	EDUC 457		3	
MAJOR	EDUC 458		2	
MAJOR	EDUC 459		3	
GE PHIL-T/RS	ED/P 306	Phylosophy of Education		3
GE HUMN	HUMN ELECT	Humanities Electives		6
GE ELECT	ECON 410	Economics for Educators		3
GE ELECT	FREE ELECT	Free Electives		6
			13	**18**
			Total: 133 CREDITS	

* may be replaced by MATH 201

** Semesters may be reversed at the discretion of the department

ELEMENTARY EDUCATION

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR	EDUC 121	Foundations of Education	3	
MAJOR	EDUC 180	Field Experience I	1	
COGNATE	ENLT 103	Children's Literature		3
GE QUAN	QUAN ELECT	*Quantitative Methods I-Stats Elective	3	3
GE WRTG-SPCH	WRTG 107-COMM 100	Composition - Public Speaking	3	3
GE S/BH	PSYC 110	Fund. of Psychology	3	
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE FSEM-PHED	INTD 100- ELECT	Freshman Seminar - Physical Education	1	1
GE PHIL-T/RS	T/RS 121	Theology I		3
GE C/CIL	C/IL 102	Computing & Information Literacy		3
			17	**16**
		SECOND YEAR		
MAJOR	EDUC 222 -EDUC 244	Educ Psychology -Plan Effect Elem Instr.	3	3
MAJOR	EDUC 280	Field Experience II	1	
MAJOR	EDUC 241	Foundations of Reading		3
GE NSCI	PHYS 102 -NSCI 201	Earth Science- Sci. in Human Env.	3	3
GE PHIL-T/RS	PHIL 120-PHIL 210	Intro to Philosophy-Ethics	3	3
GE PHIL-T/RS	T/RS 122	Theology II	3	
GE HUMN	HIST 110-ELECT	History of the United States-Hum Elective	3	3
GE S/BH	PSYC 221	Childhood & Adolescence		3
GE PHED	PHED ELECT	Physical Education Instruction	1	
			17	**18**
		THIRD YEAR		
MAJOR	EDUC 348-EDUC 349	Math/Sci. Methods- LA/SS Methods	4	4
MAJOR	EDUC 380	Field Experience III	1	
MAJOR	EDUC 363	Special Learner		3
COGNATE	EDUC 343-EDUC 362	Eval. & Measurement -Psycholinguistics	3	3
COGNATE	EDUC 342	Education Media & Technology	3	
COGNATE	NURS 100	Family Health	3	
GE ELECT	PS 135 - GEOG 134	State & Local Govt.-World Reg Geog	3	3
GE PHIL-T/RS	ED/P 306	Philosophy of Education		3
GE PHED	PHED ELECT	Physical Education		1
			17	**17**
		FOURTH YEAR		
MAJOR	EDUC 440	**Professional Practice Seminar	3	
MAJOR	EDUC 441		2	
MAJOR	EDUC 442		3	
MAJOR	EDUC 443		2	
MAJOR	EDUC 444		3	
COGNATE	THTR 110	Intro to Theater		3
GE HUMN	HUMN ELECT	Humanities Elective		3
COGNATE	ECON 410	Economics for Educators		3
GE ELECT	FREE ELECT	Free Electives		6
			13	**15**
				Total: 130 CREDITS

*Includes service-learning component
NOTE: see page 287 for footnotes.

SECONDARY EDUCATION (BIOLOGY)

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
MAJOR	EDUC 121	Foundations of Education	3	
MAJOR	EDUC 180	Field Experience I		1
COGNATE	BIOL 141-142	General Biology I-II	4½	4½
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE QUAN	MATH 103	Pre-calculus	4	
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy	3	
GE PHIL-T/RS	T/RS 121	Theology I		3
GE HUMN[1]	HUMN ELECT	Humanities Elective		3
FSEM	INTD 100	Freshman Seminar	1	
			18½	**17½**
		SECOND YEAR[3]		
MAJOR	EDUC 222	Educational Psychology	3	
MAJOR	EDUC 280	Field Experience II	1	
COGNATE	BIOL 201	Anatomy & Physiology	3	
COGNATE	BIOL 250	Microbiology		5
COGNATE	CHEM 112-113	General Chemistry I-II	4½	4½
GE HUMN[1]	HUMN ELECT	Humanities Electives	3	3
GE NSCI	PHYS 102	Earth Science		3
GE S/BH	PSYC 110	Fundamentals of Psychology	3	
GE S/BH	PSYC 221	Childhood and Adolescence		3
GE PHED	PHED ELECT	Physical Education	1	
			18½	**18½**
		THIRD YEAR[3]		
MAJOR	EDUC 313	General Methods and Planning	3	
MAJOR	EDUC 314	Specific Subject Methods		3
MAJOR	EDUC 340	Reading in Secondary Schools		3
MAJOR	EDUC 380	Field Experience III	1 or	1
COGNATE	BIOL 260	Genetics	4½	
COGNATE	BIOL 370	Animal Behavior		4½
COGNATE	BIOL 375	Evolution	3	
GE PHIL-T/RS	PHIL 210	Ethics	3	
GE PHIL-T/RS	T/RS 122	Theology II		3
GE HUMN[1]	HUMN ELECT	Humanities Elective	3	
GE ELECT	ED/P 306	Philosophy of Education		3
GE PHED	PHED ELECT	Physical Education	1 or	1
			17½	**17½**
		FOURTH YEAR[3,5]		
MAJOR	EDUC 475[4]	Classroom Management-Secondary	3	
MAJOR	EDUC 476[4]	Student Teaching Plan.-Sec Ed	2	
MAJOR	EDUC 477[4]	Student Teaching Instr.-Sec Ed	3	
MAJOR	EDUC 478[4]	Student Teaching Mgmt.-Sec Ed	2	
MAJOR	EDUC 479[4]	Student Teaching Pro. Dev.-Sec Ed	3	
GE ELECT	PHIL 431	Philosophy of Science		3
GE NSCI	PHYS 120	General Physics		4
GE ELECT	NSCI 201	Science in Human Environment		3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
GE ELECT	FREE ELECT	Free Elective		3
GE PHED	PHED ELECT	Physical Education		1
			13	**17**
			Total: 138 CREDITS	

Note: see page 288 for footnotes.

SECONDARY EDUCATION (CHEMISTRY)

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FIRST YEAR[3]		
MAJOR	EDUC 121	Foundations of Education	3	
MAJOR	EDUC 180	Field Experience I		1
COGNATE	CHEM 112-113	General Analytical Chem I-II	4½	4½
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE QUAN	MATH 114	Analysis I	4	
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy	3	
GE PHIL-T/RS	T/RS 121	Theology I		3
GE HUMN[1]	HUMN ELECT	Humanities Elective		3
FSEM	INTD 100	Freshman Seminar		1
			17½	**18½**
		SECOND YEAR[3]		
MAJOR	EDUC 222	Educational Psychology	3	
MAJOR	EDUC 280	Field Experience II	1	
COGNATE	CHEM 232-233	Organic Chemistry I-II	4½	4½
COGNATE	BIOL 141	General Biology	4½	
GE PHIL-T/RS	PHIL 210	Ethics	3	
GE PHIL-T/RS	T/RS 122	Theology II		3
GE NSCI	PHYS 102	Earth Science		3
GE S/BH	PSYC 110	Fundamentals of Psychology		3
GE S/BH	PSYC 221	Childhood & Adolescence		3
GE PHED	PHED ELECT	Physical Education	1	1
			17	**17½**
		THIRD YEAR[3]		
MAJOR	EDUC 313	General Methods and Planning	3	
MAJOR	EDUC 314	Specific Subject Methods		3
MAJOR	EDUC 340	Reading in Secondary School		3
MAJOR	EDUC 380	Field Experience III	1	
COGNATE	CHEM 350	General Biochemistry I	3	
COGNATE	CHEM 104	Science & Society		3
COGNATE	PHYS 120	General Physics I	4	
GE ELECT	PHIL 432	Philosophy of Technology	3	
GE HUMN[1]	HUMN ELECT	Humanities Electives	3	3
GE NSCI	NSCI 201	Science & Human Environment		3
GE ELECT	PHIL 431	Philosophy of Science		3
GE PHED	PHED ELECT	Physical Education	1	
			18	**18**
		FOURTH YEAR[3,5]		
MAJOR	EDUC 475[4]	Classroom Management-Secondary		3
MAJOR	EDUC 476[4]	Student Teaching Plan.-Secondary		2
MAJOR	EDUC 477[4]	Student Teaching Instr.-Secondary		3
MAJOR	EDUC 478[4]	Student Teaching Mgmt.-Secondary		2
MAJOR	EDUC 479[4]	Student Teaching Pro. Dev.-Secondary		3
COGNATE	CHEM 360	Biophysical Chemistry	4½	
GE HUMN[1]	HUMN ELECT	Humanities Elective	3	
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
GE ELECT	FREE ELECT	Free Electives	6	
GE PHED	PHED ELECT	Physical Education	I	
			17½	**13**
			Total: 137 CREDITS	

Note: see page 288 for footnotes.

SECONDARY EDUCATION (COMMUNICATION)

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR[3]		
MAJOR	EDUC 121-180	Foundations of Education-Field I	3	1
COGNATE	COMM ELECT	Communication Process		3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE QUAN	QUAN ELECT	Quant. Reasoning Elective		3
GE PHIL-T/RS	PHIL 120-T/RS 121	Intro to Philosophy-Theology I	3	3
GE ELECT	ENLT 140	English Inquiry	3	
GE S/BH	PSYC 110	Fundamentals of Psychology		3
FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			16	**17**
		SECOND YEAR[3]		
MAJOR	EDUC 222-280	Educational Psychology-Field II	3	1
COGNATE	COMM ELECT	Communication Process	3	
COGNATE	COMM ELECT	Communication Option		3
COGNATE	ENLT	British Literature	3	
GE PHIL-T/RS	T/RS 122	Theology II		3
GE HUMN[1]	ENLT ELECT	American Lit. Elective		3
GE ELECT	WRTG 210	Advanced Composition		3
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE S/BH	S/BH ELECT	Social/Behavioral Elective	3	
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE PHED	PHED ELECT	Physical Education		1
			18	**17**
		THIRD YEAR[3]		
MAJOR	EDUC 313-380	General Methods and Planning-Field III	3	1
MAJOR	EDUC 314	Specific Subject Methods		3
MAJOR	EDUC 340	Reading in Secondary School		3
COGNATE	LIT-ENLT	World Lit.-American Lit.	3	3
COGNATE	ENLT 310	Strat. Teaching Writing	3	
COGNATE	ENLT 460	Tchg. Modern Grammar		3
COGNATE	COMM ELECT	Communication Option	3	3
GE HUMN[1]	HUMN ELECT	Humanities Elective	3	
GE ELECT	LIT-ENLT	Minority Literature	3	
GE PHED	PHED ELECT	Physical Education		1
			18	**17**
		FOURTH YEAR[3,5]		
MAJOR	EDUC 475[4]	Classroom Management-Secondary		3
MAJOR	EDUC 476[4]	Student Teaching Plan.-Secondary		2
MAJOR	EDUC 477[4]	Student Teaching Instr.-Secondary		3
MAJOR	EDUC 478[4]	Student Teaching Mgmt.-Secondary		2
MAJOR	EDUC 479[4]	Student Teaching Pro. Dev.-Secondary		3
COGNATE	COMM ELECT	Communication Option	3	
GE PHIL	PHIL 210	Ethics	3	
GE PHIL	ED/P 306	Philosophy of Education	3	
COGNATE	COMM ELECT	Communication Elective	3	
GE HUMN	HUMN ELECT	Humanities Electives	6	
			18	**13**
			Total: 134 CREDITS	

Note: see page 288 for footnotes.

SECONDARY EDUCATION (ENGLISH)

	Dept. and No.	Descriptive Title of Course	Credits FALL		SPRING
		FIRST YEAR[3]			
MAJOR	EDUC 121	Foundations of Education	3		
MAJOR	EDUC 180	Field Experience I	1	or	1
COGNATE	ENLT 140	English Inquiry	3		
COGNATE	ELECT	American Lit. Elective			3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Compositon	3		3
GE C/IL	C/IL 102	Computing and Information Literacy			3
GE QUAN	QUAN ELECT	Quant. Reasoning Elective	3		
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy	3		
GE PHIL-T/RS	T/RS 121	Theology I			3
GE S/BH	PSYC 110	Fundamentals of Psychology			3
FSEM	INTD 100	Freshman Seminar	1		
GE PHED	PHED ELECT	Physical Education			1
			16-17		**16-17**
		SECOND YEAR[3]			
MAJOR	EDUC 222-280	Educational Psych.-Field Experience II	3		1
COGNATE	ENLT ELECT	English Literature	3		
COGNATE	ENLT ELECT	American Literature	3		3
COGNATE	ENLT 220	Shakespeare			3
COGNATE	ELECT	Theatre Elective			3
GE PHIL	PHIL 210	Ethics	3		
GE ELECT	WRTG 210	Advanced Composition			3
GE HUMN	HUMN ELECT	Rep. World Literature			3
GE NSCI	NSCI ELECT	Natural Science Elective	3		
GE S/BH	S/BH ELECT	Social/Behavioral Elective	3		
GE PHED	PHED ELECT	Physical Education			1
			18		**17**
		THIRD YEAR[3]			
MAJOR	EDUC 313	General Methods and Planning	3		
MAJOR	EDUC 314	Specific Subject Methods			3
MAJOR	EDUC 340	Reading Sec. School			3
MAJOR	EDUC 380	Field Experience III	1		
COGNATE	ENLT 225	Writing Women			3
COGNATE	WRTG 310	Strat. for Teaching Writing	3		
COGNATE	ENLT 470	Teaching Modern Grammar			3
COGNATE	ELECT	Minority Literature	3		
GE PHIL-T/RS	T/RS 122	Theology II	3		
GE NSCI	NSCI ELECT	Natural Science Elective			3
GE HUMN	HUMN ELECT	Writing Elective			3
GE HUMN	HUMN ELECT	Humanities Elective	3		
GE PHED	PHED ELECT	Physical Education	1		
			17		**18**
		FOURTH YEAR[3,5]			
MAJOR	EDUC 475[4]	Classroom Management-Secondary			3
MAJOR	EDUC 476[4]	Student Teaching Plan.-Secondary			2
MAJOR	EDUC 477[4]	Student Teaching Instr.-Secondary			3
MAJOR	EDUC 478[4]	Student Teaching Mgmt.-Secondary			2
MAJOR	EDUC 479[4]	Student Teaching Pro. Dev.-Secondary			3
COGNATE	ELECT	English Literature	3		
GE PHIL	ED/P 306	Philosophy of Education	3		
GE HUMN	HUMN ELECT	Rep. World Literature	3		
GE ELECT	FREE ELECT	Free Electives	9		
			18		**13**
			Total: 134 CREDITS		

NOTE: see page 288 for footnotes.

SECONDARY EDUCATION (GENERAL SCIENCE)

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR[3]		
MAJOR	EDUC 121-180	Foundations of Education-Field I	3	1
COGNATE	BIOL 141-142	General Biology I-II	4½	4½
GE SPCH	COMM 100	Public Speaking	3	
GE WRTG	WRTG 107	Composition	3	
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE QUAN	MATH 114	Analysis I		4
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy	3	
GE PHIL-T/RS	T/RS 121	Theology I		3
GE HUMN	HUMN ELECT	Humanities Elective		3
FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education	1	
			18½	**18½**
		SECOND YEAR[3]		
MAJOR	EDUC 222	Educational Psychology	3	
MAJOR	EDUC 280	Field Experience II	1	
COGNATE	PHYS 120-121	General Physics I-II	4	4
COGNATE	CHEM 112-113	Gen./Analy. Chem I-II	4½	4½
GE PHIL-T/RS	PHIL 210	Ethics	3	
GE PHIL-T/RS	T/RS 122	Theology II		3
GE S/BH	PSYC 110	Fundamentals of Psychology		3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
			18½	**17½**
		THIRD YEAR[3]		
MAJOR	EDUC 313	General Methods and Planning	3	
MAJOR	EDUC 380-314	Field III-Specific Subject Meth.	1	3
MAJOR	EDUC 340	Reading in Secondary School		3
COGNATE	ELECT	Environmental Context	3	
COGNATE	ELECT	Technological Context	3	
GE ELECT	PHIL 431	Philosophy of Science	3	
GE NSCI	PHYS 101-102	Modern Astronomy-Earth Science	3	3
GE S/BH	PSYC 221	Childhood & Adolescence		3
GE ELECT	PHIL 432	Philosophy of Technology		3
GE PHED	PHED ELECT	Physical Education		2
			16	**17**
		FOURTH YEAR[3,5]		
MAJOR	EDUC 475[4]	Classroom Management-Secondary		3
MAJOR	EDUC 476[4]	Student Teaching Plan.-Secondary		2
MAJOR	EDUC 477[4]	Student Teaching Instr.-Secondary		3
MAJOR	EDUC 478[4]	Student Teaching Mgmt.-Secondary		2
MAJOR	EDUC 479[4]	Student Teaching Pro. Dev.-Secondary		3
COGNATE	ELECT	Environmental Context	3	
COGNATE	CHEM 104	Science & Society	3	
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE ELECT	FREE ELECT	Free Electives	6	
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
			18	**13**
			Total: 137 CREDITS	

Note: see page 288 for footnotes.

SECONDARY EDUCATION (LATIN)

	Dept. and No.	Descriptive Title of Course	Credits FALL		Credits SPRING
		FIRST YEAR[3]			
MAJOR	EDUC 121	Foundations of Education	3		
MAJOR	EDUC 180	Field Experience I	1	or	1
COGNATE	LAT 211-212	Intermediate Latin I-II	3		3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3		3
GE C/IL	C/IL 102	Computing and Information Literacy			3
GE QUAN	QUAN ELECT	Quant. Reasoning Elective	3		
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy	3		
GE PHIL-T/RS	T/RS 121	Theology I			3
GE S/BH	PSYC 110	Fundamentals of Psychology			3
FSEM-PHED	INTD 100-PHED ELECT	Freshman Seminar-Physical Education	1		1
			16-17		**16-17**
		SECOND YEAR[3]			
MAJOR	EDUC 222-280	Educational Psych.-Field Exp. II	3		1
COGNATE	ELECT	Latin Electives	6		6
GE PHIL-T/RS	T/RS 122	Theology II			3
GE HUMN	HUMN ELECT	Humanities Electives	3		3
GE NSCI	NSCI ELECT	Natural Science Electives	3		3
GE S/BH	PSYC 221	Childhood & Adolescence	3		
GE PHED	PHED ELECT	Physical Education			1
			18		**17**
		THIRD YEAR[3]			
MAJOR	EDUC 313	General Methods and Planning	3		
MAJOR	EDUC 380-314	Field III-Specific Subj. Meth.	1		3
MAJOR	EDUC 340	Reading in Secondary School			3
COGNATE	ELECT	Latin Electives	6		3
COGNATE	ELECT	Related Elective			3
GE PHIL-T/RS	ED/P 306	Philsosphy of Education			3
GE PHIL-T/RS	PHIL 210	Ethics	3		
GE ELECT	SOC 234	Cultural Anthropology			3
GE ELECT	FREE ELECT	Free Elective	3		
GE PHED	PHED ELECT	Physical Education	1		
			17		**18**
		FOURTH YEAR[3,5]			
MAJOR	EDUC 475[4]	Classroom Management-Secondary			3
MAJOR	EDUC 476[4]	Student Teaching Plan.-Secondary			2
MAJOR	EDUC 477[4]	Student Teaching Instr.-Secondary			3
MAJOR	EDUC 478[4]	Student Teaching Mgmt.-Secondary			2
MAJOR	EDUC 479[4]	Student Teaching Pro. Dev.-Secondary			3
COGNATE	LAT ELECT	Latin Elective	3		
COGNATE	ELECT	Related Elective	3		
GE HUMN	HUMN ELECT	Humanities Electives	6		
GE ELECT	FREE ELECT	Free Electives	6		
			18		**13**
					Total: 134 CREDITS

Note: see page 288 for footnotes.

SECONDARY EDUCATION (MATH)

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FIRST YEAR[3]		
MAJOR	EDUC 121-180	Foundations of Education-Field I	3	1
COGNATE	MATH 103[6]	Precalculus	4	
COGNATE	MATH 114	Analysis I		4
COGNATE	MATH 142	Discrete Structures	4	
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE ELECT	CMPS 134	Computer Science I		3
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy	3	
GE PHIL-T/RS	T/RS 121	Theology I		3
FSEM	INTD 100	Freshman Sem.-Physical Education	1	1
			18	**18**
		SECOND YEAR[3]		
MAJOR	EDUC 222-280	Educational Psych.-Field II	3	1
COGNATE	MATH 221-222	Analysis II-III	4	4
GE PHIL-T/RS	T/RS 122	Theology II		3
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE NSCI	NSCI ELECT	Natural Science Electives	3	3
GE S/BH	PSYC 110	Fundamentals of Psychology	3	
GE S/BH	S/BH ELECT	Social/Behavioral Elective		3
GE ELECT	FREE ELECT	Free Elective		3
GE PHED	PHED ELECT	Physical Education	1	1
			17	**18**
		THIRD YEAR[3]		
MAJOR	EDUC 313	General Methods and Planning	3	
MAJOR	EDUC 380-314	Field III-Specific Subj. Meth.	1	3
MAJOR	EDUC 340	Reading in Secondary School		3
MAJOR	EDUC 312	Secondary Math Curriculum	3	
COGNATE	MATH 204	Special Topics Statistics		3
COGNATE	MATH 325	History and Philosophy of Mathematics	3	
COGNATE	MATH 345	Geometry	3	
COGNATE	MATH 351	Linear Algebra		3
GE PHIL-T/RS	PHIL 210	Ethics	3	
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	FREE ELECT	Free Elective		3
			19	**18**
		FOURTH YEAR[3,5]		
MAJOR	EDUC 475[4]	Classroom Management-Secondary		3
MAJOR	EDUC 476[4]	Student Teaching Plan.-Secondary		2
MAJOR	EDUC 477[4]	Student Teaching Instr.-Secondary		3
MAJOR	EDUC 478[4]	Student Teaching Mgmt.-Secondary		2
MAJOR	EDUC 479[4]	Student Teaching Pro. Dev.-Secondary		3
COGNATE	MATH 448	Modern Algebra	3	
COGNATE	ELECT	Related Elective	3	
GE PHIL-T/RS	ED/P 306	Philosophy of Education	3	
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE ELECT	FREE ELECT	Free Elective	3	
			15	**13**
			Total: 136 CREDITS	

Note: see page 288 for footnotes.

SECONDARY EDUCATION (MODERN LANGUAGE)

	Dept. and No.	Descriptive Title of Course	Credits FALL		SPRING
		FIRST YEAR[3]			
MAJOR	EDUC 121	Foundations of Education	3		
MAJOR	EDUC 180	Field Experience I	1	or	1
COGNATE	MLANG 311-312*	Advanced Comp.-Conv. I-II	3		3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3		3
GE C/IL	C/IL 102	Computing and Information Literacy	3		
GE PHIL-T/RS	T/RS 121-PHIL 120	Theology I-Intro. to Philosophy	3		3
GE NSCI	NSCI ELECT	Natural Science Elective			3
GE S/BH	PSYC 110	Fundamentals of Psychology			3
FSEM	INTD 100	Freshman Seminar	1		
GE PHED	PHED ELECT	Physical Education			1
			16-17		**16-17**
		SECOND YEAR[3]			
MAJOR	EDUC 222-280	Educational Psych.-Field Exp. II	3		1
COGNATE	MLANG 321-322**	Stylistics I-II	3		3
COGNATE	ELECT	Modern Lang. Electives	3		3
GE QUAN	QUAN ELECT	Quant. Reasoning Elective	3		
GE PHIL-T/RS	T/RS 122	Theology II			3
GE HUMN	HUMN ELECT	Humanities Elective	3		
GE NSCI	NSCI ELECT	Natural Science Elective			3
GE S/BH	PSYC 221	Childhood & Adolescence			3
GE ELECT	FREE ELECT	Free Elective	3		
GE PHED	PHED ELECT	Physical Education			1
			18		**17**
		THIRD YEAR[3]			
MAJOR	EDUC 313	General Methods and Planning	3		
MAJOR	EDUC 380-314	Field Exp. III-Specific Subj. Meth.	1		3
MAJOR	EDUC 340	Reading in Secondary School			3
COGNATE	ELECT	Modern Language Electives	6		3
COGNATE	ELECT	Related Electives	3		3
GE HUMN	HUMN ELECT	Humanities Electives	3		3
GE ELECT	SOC 234	Cultural Anthropology			3
GE PHED	PHED ELECT	Physical Education	1		
			17		**18**
		FOURTH YEAR[3,5]			
MAJOR	EDUC 475[4]	Classroom Management-Secondary			3
MAJOR	EDUC 476[4]	Student Teaching Plan.-Secondary			2
MAJOR	EDUC 477[4]	Student Teaching Instr.-Secondary			3
MAJOR	EDUC 478[4]	Student Teaching Mgmt.-Secondary			2
MAJOR	EDUC 479[4]	Student Teaching Pro. Dev.-Secondary			3
COGNATE	ELECT	Modern Language Elective	3		
GE PHIL-T/RS	ED/P 306	Philosophy of Education	3		
GE PHIL-T/RS	PHIL 210	Ethics	3		
GE HUMN	HUMN ELECT	Humanities Elective	3		
GE ELECT	ELECT	Related Elective	3		
GE ELECT	FREE ELECT	Free Elective	3		
			18		**13**
			Total: 134 CREDITS		

* Spanish, French or German should be selected as a specialization within Modern Language (MLANG).

** Students whose specialization within Modern Languages is Spanish are required to take SPAN 313, SPAN 314, SPAN 320, and SPAN 321. In Spanish, there is no Advanced Stylistics II.

Note: see page 288 for footnotes.

SECONDARY EDUCATION (PHYSICS)

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR[3]		
MAJOR	EDUC 121-180	Foundations of Education-Field I	3	1
COGNATE	PHYS 140-141	Elements of Physics I-II	4	4
COGNATE	MATH 221	Analysis II		4
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE C/IL	MATH 114	Analysis I	4	
GE QUAN	C/IL 102	Computing and Information Literacy	3	
GE PHIL-T/RS	PHIL 120	Intro. Phil.		3
GE HUMN	HUMN ELECT	Humanities Elective		3
FSEM	INTD 100	Freshman Seminar	1	
			18	**18**
		SECOND YEAR[3]		
MAJOR	EDUC 222-280	Educational Psychology-Field II	3	1
COGNATE	MATH 222	Analysis III	4	
COGNATE	PHYS 270	Modern Physics	4	
COGNATE	PHYS 350	Applied & Engr. Math		3
COGNATE	PHYS ELECT	Physics Elective		3
GE PHIL-T/RS	PHIL 210	Ethics		3
GE PHIL-T/RS	T/RS 121-122	Theology I-II	3	3
GE S/BH	PSYC 110	Fundamentals of Psychology	3	
GE S/BH	PSYC 221	Childhood & Adolescence		3
GE PHED	PHED ELECT	Physical Education	1	1
			18	**17**
		THIRD YEAR[3]		
MAJOR	EDUC 313	General Methods and Planning	3	
MAJOR	EDUC 380-314	Field III-Specific Subject Meth.	1	3
MAJOR	EDUC 340	Reading in Secondary School		3
COGNATE	PHYS 473	Optics	3	
COGNATE	PHYS ELECT	Physics Elective		3
GE ELEC	PHIL 432	Philosophy of Technology	3	
GE HUMN	HUMN ELECT	Humanities Elective		3
GE NSCI	BIOL 101-PHYS 102	Gen. Biology I-Earth Science	3	3
GE ELECT	CHEM 100	General Chemistry	3	
GE ELECT	PHIL 431	Philosophy of Science		3
GE PHED	PHED ELECT	Physical Education	1	
			17	**18**
		FOURTH YEAR[3,5]		
MAJOR	EDUC 475[4]	Classroom Management-Secondary		3
MAJOR	EDUC 476[4]	Student Teaching Plan.-Secondary		2
MAJOR	EDUC 477[4]	Student Teaching Instr.-Secondary		3
MAJOR	EDUC 478[4]	Student Teaching Mgmt.-Secondary		2
MAJOR	EDUC 479[4]	Student Teaching Pro. Dev.-Secondary		3
COGNATE	PHYS 447	Electromagnetics	3	
COGNATE	PHYS ELECT	Physics Elective	3	
GE HUMN	HUMN ELECT	Humanities Electives	6	
GE ELECT	FREE ELECT	Free Elective	3	
GE PHIL - T/RS ELECT	PHIL - T/RS ELECT	Philosophy or T/RS Elective	3	
			18	**13**
			Total: 137 CREDITS	

Note: see page 288 for footnotes.

SECONDARY EDUCATION (SOCIAL STUDIES)

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR[3]		
MAJOR	EDUC 121	Foundations of Education	3	
MAJOR	EDUC 180	Field Experience I	1	1
COGNATE	HIST 110-111	US History I-II	3	3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE QUAN	QUAN ELECT	Quant. Reasoning Elective	3	
GE PHIL-T/RS	T/RS 121	Theology I	3	
GE NSCI	NSCI ELECT	Natural Science Elective		3
GE S/BH	PSYC 110	Fundamentals of Psychology		3
FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			17	**17**
		SECOND YEAR[3]		
MAJOR	EDUC 222-280	Educational Psych.-Field II	3	1
COGNATE	GEOG 134	World Regional Geography	3	
COGNATE	ELECT	Non-western History	3	
COGNATE	PS 130-131	Am. Nat. Government I-II	3	3
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy		3
GE PHIL-T/RS	T/RS 122	Theology II		3
GE HUMN	HIST 120-121	European History I-II	3	3
GE NSCI	NSCI ELECT	Natural Science Elective		3
GE ELECT	SOC 110	Intro. to Sociology	3	
GE PHED	PHED ELECT	Physical Education		1
			18	**17**
		THIRD YEAR[3]		
MAJOR	EDUC 313	General Methods and Planning	3	
MAJOR	EDUC 380-314	Field III-Specific Subj. Meth.	1	3
MAJOR	EDUC 340	Reading in Secondary School		3
COGNATE	SOC 234	Cultural Anthropology		3
COGNATE	H/PS 214	World Politics		3
COGNATE	PS 231	The Public Policy Process	3	
COGNATE	ELECT	Minority History	3	
GE PHIL-T/RS	ED/P 306	Philosophy of Education	3	
GE S/BH	PSYC 220	Social Psychology	3	
GE ELECT	ECO 410	Economics for Education Majors		3
GE ELECT	SOC 112	Social Problems		3
GE PHED	PHED ELECT	Physical Education	1	
			17	**18**
		FOURTH YEAR[3,5]		
MAJOR	EDUC 475[4]	Classroom Management-Secondary		3
MAJOR	EDUC 476[4]	Student Teaching Plan.-Secondary		2
MAJOR	EDUC 477[4]	Student Teaching Instr.-Secondary		3
MAJOR	EDUC 478[4]	Student Teaching Mgmt.-Secondary		2
MAJOR	EDUC 479[4]	Student Teaching Pro. Dev.-Secondary		3
COGNATE	ELECT	History or Pol. Sci. Electives	6	
GE PHIL-T/RS	PHIL 210	Ethics	3	
GE HUMN	HUMN ELECT	Humanities Electives	6	
GE ELECT	FREE ELECT	Free Elective	3	
			18	**13**
			Total: 135 CREDITS	

Note: see page 288 for footnotes.

SPECIAL EDUCATION

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR[3]		
MAJOR	EDUC 180	Field Experience I	1	
COGNATE	EDUC 121	Foundations of Education	3	
COGNATE	EDUC 341	Educ. of Exceptional Child	3	
GE QUAN	MATH 104	Math for Elem. Teachers		3
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE NSCI	PSYC 106	Drugs and Behavior		3
GE S/BH	PSYC 110	Fundamentals of Psychology	3	
GE S/BH	PSYC 221	Childhood and Adolescence		3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	3	3
GE FSEM	INTD 100	Freshman Seminar	1	
			17	**18**
		SECOND YEAR[3]		
MAJOR	EDUC 280	Field Experience II		1
MAJOR	EDUC 265	SPED Educational Assessment		3
MAJOR	EDUC 258	Assessment Practicum		1
MAJOR	EDUC 226	Sec., Transitional & Voc. Services		3
MAJOR	EDUC 267	Learning Disabilities	3	
COGNATE	EDUC 222	Educational Psychology	3	
COGNATE	EDUC 120	Applied Statistics	3	
COGNATE	HS 241	Case Management & Interviewing		3
COGNATE	EDUC 241	Foundations of Reading Inst.	3	
COGNATE	PSYC 225	Abnormal Psychology	3	
GE NSCI	PSYC 231/PSYC 105	Behavioral Neuroscience/Brain and Human Nature		3
GE PHIL-T/RS	PHIL 210	Ethics	3	
GE PHED	PHED ELECT	Physical Education		1
			18	**15**
		THIRD YEAR[3]		
MAJOR	EDUC 380	Field Experience III		1
MAJOR	EDUC 369	Early Assessment & Intervention	3	
MAJOR	EDUC 367	Designing Curriculum for Elem. SPED	3	
MAJOR	EDUC 368	Designing Curriculum for Sec. SPED		3
MAJOR	EDUC 364	Inclusionary Classroom Practices	3	
MAJOR	EDUC 366	Emotional & Behavioral Disabilities		3
COGNATE	EDUC 342	Educational Media/Tech.	3	
COGNATE	HS 322-333	Mental Retardation-Multiculturalism in HS	3	3
GE HUMN	HUMN ELECT[1]	Humanities Elective		3
GE ELECT	ENLT 130-EDUC 131	Children's Lit. or Exp. Cult. Div. Child Lit.	3	
GE PHED	PHED ELECT	Physical Education		1
GE PHIL-T/RS	T/RS 122	Theology II		3
			18	**17**
		FOURTH YEAR[3,4]		
MAJOR	EDUC 365[4]	Professional Seminar		3
MAJOR	EDUC 461[4]	Planning in SPED Student Teaching		2
MAJOR	EDUC 462[4]	Instruction in SPED Student Teaching		3
MAJOR	EDUC 463[4]	Managing SPED Instruction		2
MAJOR	EDUC 464[4]	Professional Growth in SPED		3
COGNATE	HS	Physical Disabilities	3	
GE HUMN	HUMN ELECT	Humanities Electives	9	
GE PHIL-T/RS	ED/P 306	Philosophy of Education	3	
GE PHED	PHED ELECT	Physical Education	1	
			16	**13**
				Total: 132 CREDITS

Note: see page 288 for footnotes.

The following courses are not available to students matriculating during or after Fall 2001: EDUC 140, EDUC 242, EDUC 344, EDUC 345, EDUC 346, EDUC 347, EDUC 351, EDUC 352, EDUC 451.

EDUC 110 Prof. Cannon
Values Development 3 credits
A course designed to acquaint the student with theories relating to value development: what values are, and how they are formed. The affective process, value systems, activities for value-development suitable for use by parents, teachers and others involved in human relations will be covered. Open to all majors.

EDUC 113 Staff
Reading-Research 3 credits
A course designed to increase a student's proficiency in reading and research. The following skill areas will be covered: comprehension, vocabulary, expression, critical analysis, library and study skills. Students will be required to develop minimum computer competencies. Lecture and laboratory approaches are utilized with the emphasis on individualized instruction.

EDUC 120 Dr. Fusaro
(Q,W)Applied Statistics 3 credits
(Prerequisite: WRTG 107) A writing-intensive, quantitative-reasoning course designed to enable students to use statistics to solve problems and to communicate clearly the procedures employed and the results obtained. Students will be required to perform statistical computations and to write as a means of learning the course material and expressing comprehension of it. Topics covered include hypothesis testing, correlation, t-test, and Chi-square test of independence.

EDUC 121 Staff
The Foundations of Education 3 credits
This course is designed to examine the characteristics of the public school system in the United States, the role of education in contemporary society, and current issues related to education.

EDUC 131 Staff
(D)Experiencing Cultural 3 credits
Diversity Through Children's Literature
A course designed to introduce students to the diversity of cultures represented in children's literature as a way to identify and differentiate the variety of cultures that they may encounter as teachers.

EDUC 140 Dr. Mbugua
(D)Early Childhood Education 3 credits
An introductory overview of the theory, research and practice of early-childhood education. Consideration will be given to the educational process from the fetal stages on through the first three years of life as well as the early years of schooling.

EDUC 180 Staff
Field Experience I 1 credit
(Pre- or co-requisite: EDUC 121) This course prepares for field-experience requirements in EDUC 280 and 380. It focuses on the development of observation and reflective skills through case studies, vignettes and video situations. Application required.

EDUC 222 Dr. Lo
Educational Psychology 3 credits
This course examines the psychological basis of teaching strategies, classroom environment, learning, motivation, reinforcement, and evaluation.

EDUC 226 Dr. Hobbs
Secondary, Transitional and 3 credits
Vocational Services
The role of the special-education teacher in designing and implementing transitional and vocational services for the disabled student. Emphasis is placed upon the role of the special-education professional as an advocate for the disabled in accessing school, community, state, and federal resources.

EDUC 241 Staff
Foundations of Reading 3 credits
Instruction
A basic course in reading. It provides an introduction to reading-instruction, reading programs, and the reading process as it relates to language acquisition and learning to read. The readiness, reading skills, techniques and methods which are essential for effective reading will be examined.

EDUC 242 Dr. Cozza
Mathematics Methods for Elementary Teaching 3 credits
The course provides the Elementary Education major with planning and instructional strategies appropriate for use in the mathematics area of elementary curriculum. An analysis of content will be made in light of the needs of the elementary student and society.

EDUC 244 Staff
Planning Effective Elementary Instruction 4 credits
This course prepares the elementary major with the research-based tools and strategies required to prepare lesson and long-term planning, consistent with best practice, for exemplary instruction in the classroom. Particular attention will be paid to alignment of objectives and assessment consistent with the Pennsylvania Academic Standards.

EDUC 251 Dr. Mbugua
Development of the Early Learner 3 credits
This course will be focus on the development of the early learner, birth through age eight. Psychomotor, affective and cognitive development, as well as special-needs children, will be studied. Theory to practice linkages will be stressed. An observation component is part of the course expectation.

EDUC 252 Dr. Wenze
Assessment in Early Childhood Education 3 credits
(Prerequisites: EDUC 140 and 251) This course will focus on strategies, methods, and instruments for assessing the early learner's development in the cognitive, psychomotor, and affective domains. Theory-to-practice linkages will be stressed. An observation component is part of the course expectation.

EDUC 256 Dr. Wenze
Family and Community Relations 3 credits
This course prepares the ECE teacher with the strategies and communication skills necessary to build positive relationships with colleagues within the school and agencies in the larger communities that can contribute to the well-being of each student in order to realize the full developmental potential of each child.

EDUC 258 Dr. Wenze
Assessment Practicum 1 credit
(Co-requisite: EDUC 265) Students will obtain hands-on experience in the assessment of special-needs students and adults.

EDUC 265 Dr. Hobbs
SPED Educational Assessment 3 credits
This course will focus on the stategies, methods, and instruments for assessing the disabled student's development in the cognitive, psychomotor, and affective domains. Theory-to-practice linkages will be stressed. An observation component is part of the course expectation.

EDUC 267 Dr. Hobbs
Learning Disabilities 3 credits
This course provides an introduction to learning disabilities. Definitions, current theories, etiological bases, and educational management of students with learning disabilities and/or hyperactivity and attention deficit are emphasized.

EDUC 280 Staff
Field Experience II 1 credit
(Prerequisites: EDUC 121 and 180; pre- or co-requisite: EDUC 222) The course is closely associated with EDUC 121, 222, and 180. Projects will be assigned to be carried out in basic education schools and other agencies through observation, tutoring, and oral/written reports. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment. Application required.

ED/P 306 Staff
(P)Philosophy of Education 3 credits
(Formerly ED/P 106) An examination of representative modern systemic philosophies of education with a critical analysis of the answers that each system of philosophy provides to the important questions concerning the nature of knowledge, value, man, and society.

EDUC 310 Staff
Special Topics in Education 1-3 credits
A series of courses dealing with specific educational issues, theories, ideologies, skills, methods, or other designated topics for individual or group study. Course is offered in accord with student need.

EDUC 312 Staff
The Secondary School Mathematics Curriculum 3 credits
(Co-requisite: EDUC 313) This course examines the strategies and content of mathematics curricula in the secondary school and attempts to compare them to major contemporary reform efforts. The course includes a review of secondary-school (junior and senior high school) mathematics.

EDUC 313 Staff
General Methods and Planning 3 credits
(Prerequisite: Education 222; pre- or co-requisite for EDUC 380) Methodology for setting direction in the classroom, creating a learning situation, developing the content, reinforcing and evaluating will be covered. Students will be involved with developing plans for teaching.

EDUC 314 Staff
Specific Subject Methods 3 credits
(Prerequisite: EDUC 313) Utilizing knowledge of planning and teaching, students will be guided in the analysis of specific content and techniques for teaching that content. They will demonstrate their ability to carry out plans in "micro" teaching experiences.

EDUC 340 Staff
Reading in the Secondary School 3 credits
This course is the study of the reading process with emphasis placed on understanding and skills needed by secondary school students in their subject fields.

EDUC 341 Prof. Cannon
The Education of the Exceptional Child 3 credits
A general view of the field; historical background – both philosophical and legislative. A survey of physical, mental, and emotional handicaps and of giftedness, along with remedial and preventive practices with a look at the future.

EDUC 342 Dr. Wiley
Educational Media and Technology 3 credits
A course in which students are expected to produce media appropriate for classroom use. The student is also expected to exhibit competency in the use of common education media equipment and the uses of computers. Students will also be introduced to modern and future forms of media technology appropriate for the classroom teacher.

EDUC 343 Dr. Fusaro
Evaluation and Measurement 3 credits
This course acquaints prospective teachers with the various facets of test interpretation and test construction. Standardized achievement, diagnostic, and aptitude tests will be covered, along with teacher-made objective and essay tests. Emphasis will be placed on constructing valid and reliable tests by the teacher. The use and misuse of standardized tests and teacher-made tests will be discussed.

EDUC 344 Dr. Wiley
Science Methods for Elementary Teaching 3 credits
This course is designed to provide the Elementary Education major with planning and instructional strategies appropriate for use in the science area of the Elementary curriculum. An analysis of content and methodologies will be made in light of the needs of the elementary school, the elementary student and society.

EDUC 345 Dr. Lo
Language Arts Methods 3 credits
The course is designed to provide the Elementary major with a knowledge of the process of a child's language acquisition. Planning for the instructional strategies used in teaching oral/written composition, grammar, listening, speaking, spelling and handwriting skills are examined.

EDUC 346 Dr. Cozza
(D)Social-Studies Methods 3 credits
The course is designed to provide the Elementary major with a knowledge of the child's needs in the social sciences and the humanities. Planning for the instructional strategies used in teaching history, geography, and economics are examined.

EDUC 347 Dr. Montgomery
Instructional Strategies for Content-Area Reading 3 credits

The course is designed to introduce students to procedures to teach functional reading skills in the elementary schools. Emphasis will be placed on the specialized vocabularies, concepts and study skills which are considered necessary for the comprehension of reading materials pertinent to content-area subjects. Various resources and devices will be examined.

EDUC 348 Dr. Wiley
Integrated Methods: Elem Math/Science 4 credits

This course is designed to provide the elementary education major with planning and instructional strategies necessary for exemplary science and mathematics instruction in both distinct and integrated methods of delivery. An analysis of similarities and differences in content and standards within these disciplines will guide the study.

EDUC 349 Dr. Wenze
Integrated Methods: Elem Lang Arts/Soc Studies 4 credits

This course is designed to provide the elementary education major with planning and instructional strategies necessary for exemplary language arts and social studies instruction in the classroom. Attention will be paid to those strategies that might be used for integrated instruction as well as instruction of each area as separate and distinct disciplines.

EDUC 351 Dr. Wenze
Methods Across the ECE Curriculum 3 credits

This course is designed to explore methods for integrating a primary curriculum to include social-studies content, literature and language arts, as well as the expressive arts. An integrated curriculum which invites children to become involved in a variety of creative activities and learning situations will be stressed.

EDUC 352 Staff
ECE Methods in Math/Science/Health 3 credits

This course will provide the education student with an appropriate knowledge base from which to design instructional sequences which integrate science, health and mathematics concepts for young learners.

EDUC 353 Staff
Math/Science/Health for Early Childhood Teaching 3 credits

(Pre- or co-requisite: EDUC 242 and 344)
This course will provide individuals receiving certification in both Elementary and Early Childhood Education with an appropriate knowledge base from which to design instructional sequences which integrate science, health, and mathematics concepts for young learners.

EDUC 354 Dr. Cozza
Integrated Methods: ECE Math/Science/Health 4 credits

This course, developed for the ECE Major, will provide instructional strategies necessary for instructional sequences which integrate science, health and mathematics content and experiences for young learners.

EDUC 356 Dr. Wenze
Integrated Methods: ECE Soc St/Lang/Express Arts 4 credits

This course, developed for the ECE Major, will provide instructional strategies necessary for instructional sequences which integrate language arts, expressive arts and social studies content and experiences for young learners.

EDUC 362 Dr. Lo
Psycholinguistics 3 credits

This course is designed to examine the language development in children as well as correlation between language and cognition. Particular attention will be given to designing educational environments and interactions which facilitate language development in children.

EDUC 363 Staff
Teaching Special Learners 3 credits
This course is intended to introduce those aspects of students which would qualify them as "special needs" students in physical, cognitive and/or social areas. The course will provide strategies that will enable developing teachers to provide meaningful learning experiences to all students included in their classrooms.

EDUC 364 Dr. Hobbs
(D)Inclusionary Classroom Practices 3 credits
Emphasis will be placed on the special-education teacher as one member of an educational team. Students will receive guidance in supporting the disabled student in a general-education classroom, supporting the general-education teacher in providing instruction for the disabled child, and generally facilitating the acceptance and optimal learning of the disabled student in a general-education environment.

EDUC 365 Staff
Professional Seminar 3 credits
Focuses on the special educator as one team member in a larger professional group which may include administrators, ancillary staff, parents, and other professionals. Students will be closely guided in learning to write IEPs, transitional plans, and school-based grant proposals. Additionally, students will receive guidance in constructing a portfolio and in case management. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment.

EDUC 366 Staff
Emotional/Behavioral Disabilities 3 credits
A study of the problems associated with emotional and behavioral disabilites in the classroom. Emphasis is placed on behavior management and appropriate learning strategies for inclusionary general-education classes, self-contained special-education classes, and residential placements.

EDUC 367 Staff
Designing Curriculum for Elementary Special Education 3 credits
Emphasis is on the effective design and use of curriculum and materials to educate elementary students with special needs.

EDUC 368 Staff
Designing Curriculum for Secondary Special Education 3 credits
Emphasis is on the effective design and use of curriculum and materials to educate secondary students with special needs.

EDUC 369 Staff
Early Assessment and Intervention 3 credits
This course will focus on the development of the early learner, birth through age eight, along with appropriate assessment and intervention techniques for children falling under the IDEA.

EDUC 380 Staff
Field Experience III 1 credit
(Prerequisites: EDUC 280, 313) This course will be closely associated with the methods courses. An emphasis is placed on studying teaching techniques and involvement in teacher activities in basic-education schools. Secondary section offered in the fall; Elementary section in the spring. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment. Application required.

EDUC 440 Prof. Nimerosky
Elementary Classroom Management and Discipline 3 credits
In-depth study of the rationale, theories, and techniques for creating a situation where learning can take place and for handling specific individual and group behavior problems in productive ways. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment.

EDUC 441 Staff
Planning in Elementary Student Teaching 2 credits
Preparation of actual teaching plans during elementary student teaching. Application required.

EDUC 442 Staff
Instruction in Elementary 3 credits
Student Teaching
Involvement in implementing methods and techniques. Elementary-school student teaching on a full-time basis under the supervision of classroom teachers and University supervisors.

EDUC 443 Staff
Managing Elementary 2 credits
Classrooms in Student Teaching
Involvement in the management of learning situations during elementary student teaching.

EDUC 444 Staff
Professional Growth in 3 credits
Elementary Student Teaching
The demonstration of professional growth during student teaching as evidenced by professional behavior and skills, a commitment to improvement, and ability to relate to others. This will include attendance at and participation in a weekly seminar to analyze and discuss professional considerations and student-teaching problems. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment.

EDUC 451 Staff
Early-Childhood 5 credits
Education Student Teaching
This course consists of a high-intensity practicum in the early-childhood classroom at a pre-K level. Assignment by the Education Department to an ECE classroom requires completion of an application process. Attendance at weekly seminars is also required. This course must be preceded by or follow Elementary Student Teaching if state certification is being pursued. A grade of "C" or higher is required for endorsement of certification applications. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment.

EDUC 461 Staff
Planning in SPED 2 credits
Student Teaching
Preparation of actual teaching plans during special-education student teaching. Application required.

EDUC 462 Staff
Instruction in SPED 3 credits
Student Teaching
Involvement in implementing methods and techniques. Special-education student teaching on a full-time basis under the supervision of classroom teachers and University supervisors.

EDUC 463 Staff
Managing SPED 2 credits
Student Teaching Instruction
Involvement in the management of learning situations during special-education student teaching.

EDUC 464 Staff
Professional Growth in 3 credits
Special-Education Student Teaching
The demonstration of professional growth during student teaching as evidenced by professional behavior and skills, a commitment to improvement, and ability to relate to others. This will include attendance at and participation in a weekly seminar to analyze and discuss professional considerations and student-teaching problems. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment.

EDUC 475 Staff
Secondary Classroom 3 credits
Management and Discipline
In-depth study of the rationale, theories, and techniques for creating a situation where learning can take place and for handling specific individual and group behavior problems in productive ways. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment.

EDUC 476 Staff
Planning in Secondary Student Teaching 2 credits
Preparation of actual teaching plans during secondary student teaching. Application required.

EDUC 477 Staff
Instruction in Secondary Student Teaching 3 credits
Involvement in implementing methods and techniques. Secondary student teaching on a full-time basis under the supervision of classroom teachers and University supervisors.

EDUC 478 Staff
Managing Classrooms in Secondary Student Teaching 2 credits
Involvement in the management of learning situations during secondary student teaching.

EDUC 479 Staff
Professional Growth in Secondary Student Teaching 3 credits
The demonstration of professional growth during student teaching as evidenced by professional behavior and skills, a commitment to improvement, and ability to relate to others. This will include attendance and participation in a weekly seminar to analyze and discuss professional considerations and student-teaching problems. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment.

The Education Department ordinarily does not permit students to take courses concurrently with the student-teaching sequence. Students seeking deviations from this policy must complete a form requiring the approvals of the advisor, the appropriate program director, the department chairperson, and the dean. Student teaching requires application, which must be submitted to the appropriate advisor and approved by the program director, prior to registration for the student teaching semester. Completed ACT 34 and Child Abuse History Clearance forms are required previous to receiving a field assignment.

Footnotes for Early-Childhood Education, Elementary Education, Secondary Education and Special Education:
[1] Four courses (12 credits) in at least two of the following disciplines are required: History, Literature, Foreign Languages. However, one course in Art or Music History can be used as one of the four courses.
[2] All students take two courses designated as writing intensive and two courses designated as cultural diversity. Where possible, at least one of the writing-intensive courses should be in the major. Cultural-diversity and writing-intensive courses may also fulfill other requirements in the GE curriculum.
[3] These courses must be scheduled in the same semester. EDUC 440-444 or EDUC 475-479 comprise the student-teaching semester.
[4] Semesters may be reversed at the discretion of the program director.
Additional note for Early-Childhood and Elementary Education
[5] PHED - 1 credit in Movement and Dance required.

EXERCISE SCIENCE AND SPORT

Dr. Gary N. Wodder, Chairperson

The Department of Exercise Science and Sport consists of three areas: Physical Education, a minor in Coaching, and a major in Exercise Science.

PHYSICAL EDUCATION

The Physical Education program seeks to improve the physical-fitness levels of each student, introduce new activities, or improve and increase students' recreational skills through our offerings of over 30 different courses. Emphasis is placed on instruction in a variety of popular sports and recreational activities, especially those with carry-over value for post-college years.

Every regularly enrolled student must satisfy the 3-credit Physical Education requirement unless excused by the Department. It is possible to be excused from Physical Education classes by application to the Department if (a) a physician certifies that a student, for medical reasons, should not engage in vigorous physical activity; (b) the Department deems it advisable; (c) the student is a veteran. Grading is (S) Satisfactory or (U) Unsatisfactory.

There are a variety of formats for the Physical Education classes: one-half semester for .5 credit, three times per week for one credit, two times per week for one credit, and one time per week for one credit. Students may select from among the following: tennis, yoga, skiing, soccer, racquetball, weight training, aerobics, hapkido, volleyball, running, karate, self-defense for women, advanced life-saving, water-safety instructor, jazz dance, golf, tai chi, badminton, wellness, latin and swing dance, cardio fitness, beginning/intermediate swimming, fitness swimming, first aid/CPR, karate, wellness, and judo.

COACHING MINOR

The 17-credit Coaching minor is based on the American Sport Education Program (ASEP) and will help meet the needs of those who wish to coach and work more effectively with young athletes from youth through interscholastic sports.

Introduction to Coaching, one credit, is a suggested prerequisite for the 3-credit courses.

Dept. and No.	Descriptive Title of Course	Credits
PHED 112	First Aid/CPR/AED	1
PHED 160	Introduction to Coaching	1
PHED 202	Sport Administration	3
PHED 208	Conditioning and Training for Sport	3
PHED 203	Prevention and Care of Sports Injuries	3
PSYC 284	Sports Psychology	3
PHED 205	Teaching Sport Skills	3
		TOTAL: 17

PHED 112 Mr. Hair
First Aid/CPR 1 credit
This course leads to American Red Cross certification in CPR, First Aid, and Automated External Defibrillation (AED). Prepares students to recognize and respond to respiratory, cardiac, and other emergency situations.

PHED 160 Team
Introduction to Coaching 1 credit
Prerequisite course which will assist prospective coaches as they develop a positive coaching philosophy, apply coaching principles and use sport-management skills.

PHED 208 Prof. Robertson
Conditioning and Training for Sports 3 credits
Students will learn how to design effective, individualized training programs by incorporating training basics such as overload, specificity, adaptation and progression. Will include individual differences among athletes, muscular fitness, energy fitness and performance factors. (Formerly PHED 210.)

PHED 202 Dr. Wodder
Sports Administration 3 credits
Examines the business of coaching, offering practical approaches to the administrative functions of organizing, planning, leading and controlling. Integrates philosophy and principles into practice.

PHED 203 Prof. Robertson
Prevention and Care of Sports Injuries 3 credits
Will cover sports first aid, prevention of and dealing with sports injuries. Helps coaches become competent first responders in sports emergencies. Students will learn how to recognize and prevent common sports injuries and administer appropriate first aid. Also covers procedures for evaluating and caring for injuries, guidelines for rehabilitation and therapeutic taping.

PSYC 284 Dr. O'Malley
Sports Psychology 3 credits
(Prerequisite: PSYC 110) This course covers a variety of topics in sports psychology including the learning of athletic skills, principles of motivation, goal-setting and reinforcement. The emotional aspects of sports competition and various strategies for mental preparation for competition such as relaxation, concentration, and attentional skills will be discussed.

PHED 205 Prof. Hair
Teaching Sports Skills 3 credits
Students will master the essentials of teaching sports skills and improve their teaching effectiveness. They will learn how to prepare for teaching sports skills, how to introduce, explain, and demonstrate sports skills and use cognitive processes to improve performance.

EXERCISE SCIENCE

DR. RONALD W. DEITRICK, Program Director

Exercise Science is the study of human movement as related to exercise, sport, and physical activity. It is dedicated to promoting and integrating scientific research and education on the effects and benefits of exercise, and to the delivery of physical-activity programs that prevent disease, facilitate rehabilitation, promote health, and enhance human performance. Exercise Science is part of the field of Sports Medicine which also includes clinical areas of study. The scientific aspects of Sports Medicine include exercise physiology, biochemistry of exercise, and biomechanics. Testing of maximal oxygen consumption and lactic acid metabolism, analysis of muscle fatigue, research on muscle hypertrophy and bone density, measurement of body composition, and benefits of exercise in cardiovascular disease, diabetes and weight control are a few of the many contributions made by exercise scientists to Sports Medicine.

Few academic program majors offer such diverse opportunities after graduation as Exercise Science. The academically rigorous curriculum prepares graduates with knowledge and experience for employment opportunities in a variety of settings. In the applied health area, careers in corporate and community/hospital-based wellness programs, cardiopulmonary rehabilitation, and research centers investigating the benefits of exercise in spinal-cord injury are possibilities. Sports physiologist and strength and conditioning specialists for sports teams are also career options.

Exercise Science is an excellent option for students interested in applying to graduate health-profession programs such as osteopathic medicine, physical therapy, physician assistant, and clinical exercise physiology. Additional required course work to meet entry requirements can be chosen as electives. In this regard, students should make their career intentions known early in their program of study. Opportunities for graduate study are available in academic units of medicine, biology, physiology, and exercise science. Although not required, completion of the program provides students with the ability to take different certification exams offered by several professional organizations including the American College of Sports Medicine.

In order to graduate, Exercise Science majors must maintain an overall 2.5 GPA in major courses and an overall GPA of 2.0 in cognate courses. Students receiving a grade less than C- in any major or cognate course must repeat the course and earn a C- or better grade in that course. Completion of the service-learning requirements (20 hours per academic year) of the College of Professional Studies is also a requirement for graduation.

EXERCISE SCIENCE

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FIRST YEAR		
MAJOR	PHED 106-EXSC 210	Aerobic Fitness-Sports Physiology	1	3
COGNATE	BIOL 110-111	Structure & Function of Human Body	4	4
GE NSCI	CHEM 112-113	General & Analytical Chemistry	4½	4½
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102/102L	Computing and Information Literacy		3
GE QUAN	MATH 103-114	Pre-calculus or Analysis I	4	
GE FSEM	INTD 100	*Freshman Seminar	1	
			17½	17½
		SECOND YEAR		
MAJOR	EXSC 212	*Nutrition in Exercise and Sport	3	
MAJOR	PHED 105	Cardio. Fitness	1	
MAJOR	PHED 112	First Aid/CPR/AED	1	
COGNATE	NURS 100-BIOL 245	Family Health-General Physiology	3	4½
GE PHIL - T/RS	PHIL 120 - T/RS 121	Intro. to Philosophy-Theology I	3	3
COGNATE	PHYS 120-121	General Physics	4	4
GE HUMN (D)	HUMN ELECT (D)	Humanities Electives (Cultural Diversity)	3	3
GE S/BH	PSYC 110	Fundamentals of Psychology		3
			18	17½
		THIRD YEAR		
MAJOR	PHED 203	Prevention & Care of Ath. Injuries	3	
MAJOR	EXSC 312	*Kinesiology/Biomechanics of Movement	3	
MAJOR	EXSC 375	Exercise Testing/Programming		3
MAJOR	EXSC 380	Internship		3
MAJOR	PHED 101	Weight Training		1
COGNATE	EDUC 120	Applied Statistics	3	
COGNATE	BIOL ELECT	Biol 347 or Biol 348 or Biol 446		3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective	3	
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics – Theology II	3	3
GE ELECT	FREE ELECT	Free Elective	3	3
			18	16
		FOURTH YEAR		
MAJOR	EXSC 442	Clinical Exercise Physiology		3
MAJOR(W)	EXSC 412	*Current Topics in Ex Sci/Spts Med	3	
MAJOR	EXSC 440	Adv Physiology of Sport & Exercise	3	
MAJOR	EXSC 448	Research Methods in Exercise Science		3
MAJOR (D)	EXSC 435	Women in Sport		3
COGNATE	PSYC 284	Sports Psychology	3	
COGNATE	SOC 216	Medical Sociology	3	
GE S/BH	PSYC 222	Adulthood and Aging		3
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	FREE ELECT	Free Electives	3	
			18	15
				Total: 137½ CREDITS

*Includes service-learning component

EXSC 210 Dr. Deitrick
Sports Physiology 3 credits
(Prerequisite: BIOL 110) This course explores the physiological principles and systems underlying sport performance - aerobic and anaerobic energy, oxygen transport, and muscular and cardiovascular systems. Students will learn how to apply the principles to improve human performance.

EXSC 212 Dr. Deitrick
***Nutrition in Exercise and Sport** 3 credits
(Prerequisites: EXSC 210 or BIOL 347, CHEM 112-113 or permission of instructor) Role of nutrients in optimizing human performance. Consideration of caloric and nutrient exercise requirements, gender-specific needs, weight loss/eating disorders, and nutritional ergogenic aids.

EXSC 220 Dr. Pazzaglia
Nutrition for the Health Professions 3 credits
(Prerequisites: BIOL 110-111, CHEM 110 or112; pre- or co-requisite: CHEM 111 or 113) Focus on concepts of nutrition, including chemistry, digestion absorption and metabolism of nutrients. Exploration of the role of diet in chronic illness. Basic nutrition concepts applied to the needs of individuals across the life span, families, and communities.

EXSC 312 Dr. Dixon
***Kinesiology and Biomechanics of Human Movement** 3 credits
(Prerequisite: BIOL 110-111 or PHYS 120-121) Description of human movement via location and kinesiological action of skeletal muscles, and analysis of motion using kinematic and kinetic biomechanical principles.

EXSC 380 Dr. Dixon
Internship in Exercise Science 3 credits
(Prerequistes: EXSC 375; majors only) The application of Exercise Science principles, knowledge and skills in a supervised setting. Depending on career interests, students can select from a variety of interest including sites located outside of the Northeast region.

EXSC 375 Dr. Deitrick
Exercise Testing/ Programming for Health and Performance 3 credits
(Prerequisites: EXSC 210, major in EXSC or permission of instructor) Provides knowledge related to Graded Exercise Testing and counseling, including purposes, basic exercise ECG, energy costs of exercise, principles of exercise prescription, special populations, and case study.

EXSC 412 Dr. Dixon
***(W)Current Topics in Exercise Science and Sports Medicine** 3 credits
(Prerequisite: EXSC 210 or BIOL 347 or permission of instructor) Current topics in the field affecting health and human performance including ergogenics, exercise benefits in chronic, disease states, clinical exercise physiology, and age/gender issues.

EXSC 435 Dr. Dixon
(D)Women in Sport 3 credits
This course is designed to concentrate on the applied psychological and selected sports medicine concerns of the female athlete, including nutrition, body composition, osteoporosis, specific exercise training, female injuries and training, and psychosocial issues.

EXSC 440 Dr. Deitrick
Advanced Physiology of Sport and Exercise 3 credits
(Prerequisite: Fourth-year standing in Exercise Science) Advanced concepts of Human Performance as related to sport and exercise including physiological limits, Bioenergetics, fiber type/myoplasticity of skeletal muscle, cardiovasular dynamics and the athletic heart, and pulmonary ventilation and aerobic performance.

EXSC 442 Dr. Deitrick
Clinical Exercise Physiology 3 credits
(Prerequisite: EXSC 210 or BIOL 347 or permission of instructor) This course covers exercise response and adaptation in a variety of chronic lifestyle diseases and the use of exercise tolerance assessment to improve and optimize quality of life.

EXSC 448 Dr. Deitrick
Research Methods in Exercise Science 3 credits
(Prerequisites: Fourth-year standing in Exercise Science, EXSC 375) Designed for the student to study and gain experience in research related to the field of Exercise Science. The nature of research, methods for acquiring, analyzing, and publishing/presenting research relevant to Exercise Science.

HEALTH ADMINISTRATION AND HUMAN RESOURCES

DR. DANIEL J. WEST, Chairperson
DR. MARY HELEN Mc SWEENEY, Director of Health Administration

The Health Administration curriculum is designed to develop in students the values, knowledge and skills necessary to enter the growing field of health administration. The sequence of courses includes a significant integration of the fields health and business administration and includes a minor in business administration. The curriculum is interdisciplinary and provides the student with a broad base of knowledge for securing entry-level positions with public and private agencies organizations such as hospitals, insurance and managed care companies, pharmaceutical firms, community health and rehabilitation facilities. The curriculum also provides a solid foundation for future graduate-level education in various disciplines such as human resources administration, public health, health administration, health policy and planning, gerontology, law school, and business administration. A three-credit, 138-hour internship is required with a second three-credit internship available as an elective. Students must provide their own transportation to internships.

In order to graduate, Health Administration majors must have a 2.5 grade-point average (GPA) in major courses, and earn a minimum grade of C or better in their cognate courses. A service learning component is integrated into one health administration course during each undergraduate semester, with a minimum of 10 service hours required per semester. Dexter Hanley College students will meet the service learning requirement by completing major courses that have a service-learning component. They will not be required to complete additional service-learning hours. The HADM program is a full undergraduate member of the Association of University Programs in Health Administration.

MINOR: A minor in Health Administration requires 18 credits distributed as follows: HADM 111, 112, 211, 312, and any two other HADM courses.

HADM 111 Staff
Introduction to 3 credits
Health Administration
An initial overview of health care in the United States and the professions involved. Emphasis is placed on health-care providers and professionals in health-service settings. A 10-hour service-learning component is integrated into this course.

HADM 112 Staff
***Health Systems** 3 credits
The nature and organization of health care in the United States. Factors affecting the delivery of such services are identified to provide an understanding of the evolution and dynamics of health-care systems as well as prospects for future development. A 10-hour service-learning component is integrated into this course.

HADM211 Staff
***(W)Health Administration** 3 credits
(Prerequisite: HADM 111 or 112) Roles and functions of supervisory and administrative structure, including boards of directors in health agencies, systems and organizations, with an emphasis on managed-care environments. A 10-hour service-learning component is integrated into this course.

HADM 212 Staff
Health-Administration Law 3 credits
The legal and regulatory environment of health care and the administration of health services.

HADM 213 Staff
Supervising Health Personnel 3 credits
Principles and practices of direct supervision of personnel including motivation, leadership and various personnel functions in health-care settings. For Health Administration majors and minors only.

HEALTH ADMINISTRATION

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN YEAR	**FALL**	**SPRING**
MAJOR	HADM 111	Introduction to Health Administration	3	
MAJOR	HADM 112	*Health Systems		3
GE FSEM	INTD 100	*Freshman Seminar	1	
GE SPCH	COMM 100	Public Speaking		3
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy		3
GE WRTG	WRTG 107	Composition	3	
GE C/IL	C/IL 104	Computing and Information Literacy for Business		3
GE PHIL-T/RS	T/RS 121	Theology I	3	
GE NSCI	NSCI ELECT	Natural Science Elective	3	
GE QUAN	PSYC 210	Psychological Statistics	3	
GE S/BH	ECO 153	Principles of Microeconomics		3
GE HUMN	HUMN ELECT	Humanities Elective		3
GE PHED	PHED ELECT	Physical Education	1	
			17	**18**
		SOPHOMORE YEAR		
MAJOR	HADM 293	*Research in Health Administration	3	
MAJOR	HADM 211	*Health Administration		3
MAJOR	HADM 212	Health Administration Law		3
COGNATE	ACC 253	Financial Accounting	3	
GE PHIL-T/RS	PHIL 210	Ethics	3	
GE PHIL-T/RS	PHIL 212	Medical Ethics		3
GE PHIL-T/RS	T/RS 122	Theology II		3
COGNATE	MGT 351	Principles of Management I	3	
COGNATE	ELECT	Electives	3	3
GE NSCI	NSCI ELECT	Natural Science Elective	3	
GE HUMN	HUMN ELECT	Humanities Elective		3
			18	**18**
		JUNIOR YEAR		
MAJOR	HADM 312	*Health Finance	3	
MAJOR	HADM	Health Administration Electives	3	3
MAJOR	HADM 340	Career Seminar	1	
MAJOR	HADM 380	*Internship in Health Administration		3
COGNATE	FIN 351	Introduction to Finance		3
COGNATE	MGT 351	Introduction to Marketing		3
COGNATE	ELECT	Elective	3	
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE ELECT	FREE ELECT	Free Elective		3
GE PHED	PHED ELECT	Physical Education	1	
			14	**15**
		SENIOR YEAR		
MAJOR	HADM 441	*Issues in Health Administration		3
MAJOR	HADM	Elective	3	
MAJOR	HADM 315 (D)	*Cultural Diversity Health Administration	3	
COGNATE	ECO/IB 351	Environment of International Business	3	
COGNATE	OIM 471	Business Information Management		3
GE HUMN	HUMN ELECT	Humanities Elective		3
GE S/BH	S/BH ELECT	Social/Behavioral Elective	3	
GE ELECT	FREE ELECT	Free Electives	3	3
GE PHED	PHED ELECT	Physical Education	1	3
			16	**15**
			Total: 131 CREDITS	

*Service-learning component included

HEALTH ADMINISTRATION

Concentration in Long-Term-Care Administration

Students seeking a career in long-term care administration can select a sequence of courses in Health Administration, Business, and Gerontology, including a 1040 clock-hour HADM internship. This program of study prepares the student for job opportunities in nursing homes, assisted living, adult day care and work with chronically ill populations. Upon successful completion of the curriculum, students will have met the educational requirements of the Pennsylvania State Board of Licensure for Nursing Home Administrators and be eligible to take the state licensure examination for long-term care administrators. The Health Administration curriculum forms the infrastructure for the LTCA concentration. It includes 40 credits of HADM courses, continues the 21 credit Business minor and features 12 credits of Gerontology courses. A service learning component is integrated into one required course per semester, with a minimum of 10 service hours required per semester. The HADM/LTCA track increases the credits for the Health Administration degree from 131 for the regular HADM major to 134. Students may also earn a second minor, in Gerontology, by taking Soc 110 and Gero 230.

The HADM/LTCA program has the approval of the National Association of Board of Examiners of Long-Term Care Administrators, Inc. (NAB), 808 17th Street NW, Suite 200, Washington, DC 20006-3910, (202) 223-9750.

HADM 284 Staff
Special Topics 3 credits
Selected topics of current interest in health administration are offered on a variable basis.

HADM 293 Staff
***(W)Research in Health Administration** 3 credits
(Prerequisite: PSYC 210, majors only) Principles and processes of research in health administration including literature, review, research design, data-collection techniques, statistical analysis and professional writing in generating new knowledge and in using research in administration. A 10-hour service-learning component is integrated into this course.

HADM 312 Staff
***Health Finance** 3 credits
(Prerequisite: ACC 253 or 254 or permission of instructor) The cost of health care in society with emphasis on financial concepts and reimbursement mechanisms for health providers. A 10-hour service-learning component is integrated into this course.

HADM 314 Staff
Health Care Policy 3 credits
(HADM Junior and Senior standing) Public policy in the health care sector is studied, including the policy-making process. Implications of governmental policies for health-care organizations and administrators are discussed.

HADM 315 Staff
***(D)Cultural Diversity and Health Administration** 3 credits
(Prerequisite: HADM 211 or permission of instructor, HADM majors and minors only) Focuses on the effects of cultural diversity on health-care administration. Emphasis is placed on the importance of assessing and addressing the health care needs of various cultural groups within a given health-care service area. A 10-hour service-learning component is integrated into this course.

HADM 316 Staff
Health Care Marketing 3 credits
Marketing theories, concepts, strategies, methods and techniques are studied and applied to health care. The unique aspects of health-care services and health-care organizations are considered as they pertain to marketing.

HADM 317 Staff
Work-force Development 3 credits
(Cross-listed with HRS 252) Training and development of employees within various health-care delivery systems will be examined. Adult learning theories and the role of the training function will be critically reviewed. An in-depth study and application of the training process will require students to design, develop, implement and evaluate a training program.

HEALTH ADMINISTRATION
Concentration in Long-Term-Care Administration

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR	HADM 111	Introduction to Health Administration	3	
MAJOR	HADM 112	*Health Systems		3
GE FSEM	INTD 100	*Freshman Seminar	1	
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy		3
GE SPCH	COMM 100	Public Speaking		3
GE WRTG	WRTG 107	Composition	3	
GE C/IL	C/IL 104	Computing and Information Literacy for Business		3
GE PHIL-T/RS	T/RS 121	Theology I	3	
GE NSCI	NSCI ELECT	Elective		3
GE QUAN	PSYC 210	Psychological Statistics	3	
GE S/BH	GERO 110	Introduction to Gerontology	3	
COGNATE	GERO 216	Aging and Community		3
GE PHED	PHED ELECT	Physical Education	1	
			17	**18**
		SECOND YEAR		
MAJOR	HADM 293/w	*Research in Health Administration	3	
MAJOR	HADM 211/w	*Health Administration		3
MAJOR	HADM 212	Health Administration Law		3
MAJOR	HADM 213	Supervising Health Personnel	3	
COGNATE	GERO 218	Health and Aging	3	
GE PHIL-T/RS	PHIL 210	Ethics	3	
GE PHIL-T/RS	T/RS 122	Theology II		3
COGNATE	ACC 253	Financial Accounting	3	
COGNATE	FIN 351	Introduction to Finance		3
GE NSCI	NSCI ELECT	Natural Science Elective	3	
GE S/BH	ECO 153	Principles of Microeconomics		3
GE COGNATE	GERO 232	Aging and Death		3
			18	**18**
		THIRD YEAR		
MAJOR	HADM 312	*Health Finance	3	
MAJOR	HADM-HADM 315	Free Elective-Cultural Diversity & Health Admin.	3	3
MAJOR	HADM 340	Career Seminar	1	
MAJOR	HADM 318	*Long-Term Care Administration		3
COGNATE	MGT 351	Principles of Management I	3	
COGNATE	MKT 351	Introduction to Marketing		3
COGNATE	ECO/IB 351	Environment of International Business	3	
GE PHIL-T/RS	PHIL 212	Medical Ethics	3	
GE HUMN	HUMN ELECT	Humanities Elective		3
GE ELECT	FREE ELECT	Free Elective		3
GE PHED	PHED ELECT	Physical Education	1	1
			17	**16**
		FOURTH YEAR		
MAJOR	HADM 441	*Issues in Health Administration		3
MAJOR	HADM 480	*Internship in LTC Administration	6	6
COGNATE	OIM 471	Business Information Management		3
GE HUMN	HUMN ELECT	Humanities Electives	6	3
GE ELECT	FREE ELECT	Free Elective	3	
			15	**15**
			Total: 134 CREDITS	

*Service-learning component included

HADM 318 Staff
***Long-Term-Care Administration** 3 credits
Designed to introduce the student to Long-Term-Care (LTC) facility administration. Emphasis is placed on the differences between acute and long-term levels of care, types of LTC facilities and special concerns involving the LTC resident. A 10-hour service-learning component is integrated into this course.

HADM 340 Staff
Career Seminar 1 credit
(Prerequisite: Majors only) Seminar in which students appraise their present status and develop specific written educational and career plans for future course work, career entry and/or graduate school.

HADM 380 Staff
***Internship in** 3 credits
Health Administration
(Prerequisites: HADM 340, 18 HADM credits or approval of program director) The internship, a significant educational experience, ends the third year and involves a supervised practical experience in a community agency/organization providing health services. It provides both practical experience and an opportunity to integrate knowledge into a working professional philosophy. Students will spend a minimum of 120 hours in the field and a minimum of 18 hours in on-campus staffing sessions. Prerequisite for HADM 481. Students must provide their own transportation. Graded Satisfactory or Unsatisfactory. A 10-hour service-learning component is integrated into this course.

HADM 441 Staff
***Issues in Health-Care** 3 credits
Administration
(Prerequisite: Senior HADM majors only) A capstone course in which students demonstrate knowledge attained throughout the HADM curriculum as well as the ability to apply that knowledge in a practical manner through completion of a "mega case study", utilizing a small administrative group/team approach.

HADM 480 Staff
***Internship in** 12 credits
Long-Term Care Administration
(Prerequisite: approval of HADM director) The internship is a significant educational capstone experience that involves a supervised practical experience in a licensed long-term care facility. It provides both a practical experience in the student's field and an opportunity to integrate knowledge from a variety of courses into a working professional philosophy. Students will spend 520 hours in the field placement and 15 hours of on-campus seminars. Students must accumulate 1040 hours of internship experience by taking HADM 480 in both the fall and spring semesters of their senior year. Students must provide their own transportation. Graded Satisfactory or Unsatisfactory.

HADM 481 Staff
Internship in 3 credits
Health Administration
(Prerequisite: HADM 380) This second internship involves 150 hours in a community agency or organization providing health services; it may be taken during any regular academic term and may be completed outside the immediate University region. Approval by program director is required. Students must provide their own transportation. Graded Satisfactory or Unsatisfactory.

HUMAN RESOURCES STUDIES

DR. DANIEL J. WEST, Chairperson
DR. WILLIAM G. WALLICK, Director of Human Resources Studies

The Human Resources Studies (HRS) major is rooted in the Jesuit liberal arts tradition and prepares students to be proactive in their pursuit of fairness and equity within the workplace. Human Resources professionals work within all industries and are concerned with recruiting, developing, and retaining a productive workforce. The program is designed to educate students in the processes used to promote effective performance, development, and job satisfaction of employees. This programmatic focus is based upon the belief that a strong analytical knowledge base is critical to the successful practice of human resources. Students are actively engaged in the application of theories and how those applications can influence the effectiveness of organizations. The study of human resources theories and their application is a definitive mark of the program.

Students are exposed to an interdisciplinary curriculum, which requires the integration of knowledge from the liberal arts, social and behavioral science, and business. The HRS degree includes a required minor in general business but is also uniquely designed to offer students an additional minor in psychology or other academic areas. The changing nature of work, as influenced by social, economic, technological, and educational forces is explored, both nationally and globally. Students will develop excellence in both written and oral expression, and in the effective utilization of technology. All HRS majors are required to develop a portfolio documenting their specific talents and achievements throughout their undergraduate study.

The Human Resources Studies program leads to a Bachelor of Science degree that prepares students for graduate studies or for entry-level positions in the field of Human Resources (HR) following graduation. The HRS degree consists of a 131-credit curriculum including 37 credits from HRS major courses. In addition to The University of Scranton's requirements for graduation, students receiving the HRS degree must have at least a 2.5 GPA in all major courses and a 2.0 GPA or better in their cognate courses.

All Human Resources Studies majors are required to complete an internship that prepares students to enter jobs such as recruiter, trainer, compensation analyst, benefits specialist, human-resources generalist, and business manager. A three-credit internship consists of at least 120 hours of professional-level field experience at an approved location and under the guidance of a qualified site supervisor. An additional eighteen hours of on-campus meetings and consultation with an assigned faculty member is required. Students will produce a final project, reflective journal, and outcomes for their portfolios.

The study of the international dimensions of HR is embedded within many courses and the program strongly encourages its majors to participate in some form of international study. This can range from one course to an entire semester or summer abroad. Specific cooperative arrangements with selected institutions ensure that courses are comparable and acceptable to The University of Scranton's academic requirements. Students participating in international study must follow The University of Scranton's requirements for study abroad.

A service-learning component is integrated into selected HRS courses and at least ten hours of a service-learning experience is required during each semester or twenty hours during each academic year. Service-learning exposes students to a wide variety of workplace settings. Service-learning experiences enhance student learning and development by affording students the opportunity to make meaningful contributions to their communities. Other benefits include a better comprehension of course content that helps to integrate theory with practice, a deeper understanding of the unique causes of social problems, an increase in cognitive, personal, and spiritual growth, and a heightening of one's sense of social responsibility.

Interested and qualified students have the opportunity to earn both a Bachelor of Science degree in Human Resources Studies and a Master's Degree in Human Resources Administration. Qualified students are encouraged to apply as early as the beginning of their junior year. With careful planning, the combined B.S./M.S. degree can be completed within five academic years.

HUMAN RESOURCES STUDIES

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR	HRS 111	Macro Human Resources	3	
MAJOR	HRS 112	*Micro Human Resources		3
GE S/BH	PSYC 110	Fundamentals of Psychology	3	
GE FSEM	INTD 100	*Freshman Seminar	1	
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy		3
GE SPCH	COMM 100	Public Speaking	3	
GE WRTG	WRTG 107	Composition		3
GE C/IL	C/IL 104	Computing and Information Literacy	3	
GE PHIL-T/RS	T/RS 121	Theology I	3	
GE NSCI	NSCI ELECT	Natural Science Elective		3
QE QUAN	PSYC 210	Statistics in the Behavorial Sciences		3
GE PHED	PHED ELECT	Physical Education	1	1
			17	**16**
		SECOND YEAR		
MAJOR	HRS 251	*Performance Appraisal		3
MAJOR	HRS 252	*Workforce Education and Training	3	
MAJOR	HRS 293	Research Applications in HR		3
COGNATE	ACC 253	Financial Accounting	3	
COGNATE	PSYC 335	Psychological Testing		3
GE S/BH	ECO 101	Current Economic Issues	3	
GE PHIL-T/RS	PHIL 210	Ethics	3	
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
GE PHIL-T/RS	T/RS 122	Theology II		3
GE NSCI	NSCI ELECT	Natural Science Elective		3
GE HUMN	HUMN ELECT	Humanities Elective	3	
GE PHED	PHED ELECT	Physical Education	1	
			16	**18**
		THIRD YEAR		
MAJOR	HRS 340	Compensation and Benefits		3
MAJOR	HRS 351	*Recruitment, Selection, and Staffing	3	
MAJOR	HRS 353	HR Information Systems	3	
MAJOR	HRS 380	Career Seminar		1
MAJOR	HRS ELECT	HRS Elective	3	
COGNATE	MGT 351	Principles of Management I	3	
COGNATE	FIN 351	Introduction to Finance		3
COGNATE	ECO 351	Environment of International Business	3	
COGNATE	MKT 351	Introduction of Marketing		3
COGNATE	ELECT	Cognate Elective	3	
GE HUMN	HUMN ELECT	Humanities Elective		3
GE ELECT	FREE ELECT	Free Elective		3
			18	**16**
		FOURTH YEAR		
MAJOR	HRS 440	*Internship	3	
MAJOR	HRS 480	*Leadership Seminar		3
MAJOR	HRS ELECT	HRS Elective	3	
COGNATE	OIM 471	Business Information Management	3	
COGNATE	ELECT	Cognate Elective	3	
GE HUMN	HUMN ELECT	Humanities Electives	3	3
GE ELECT	FREE ELECT	Free Electives		9
			15	**15**
				Total: 131 CREDITS

*Includes service-learning component

MINOR: To minor in Human Resources Studies the student must take a minimum of 18 credits. Five courses are required: HRS 111, 112, 251, 252, and 340 plus one HRS elective.

HRS 111 Dr. Wallick
(S)Macro Human Resources 3 credits
A multidisciplinary study of the impact that society, the economy, and the laws has on the history of work. Distinctive trends within various occupations will also be reviewed including the influence of labor unions. Both national and international perspectives will be incorporated into the course.

HRS 112 Staff
***Micro Human Resources** 3 credits
An introduction to organizational systems that serve as the primary means in which the various human-resources functions are delivered. The theoretical foundations that support organizational systems and human-resources functions will be examined.

HRS 251 Staff
***(W)Performance Appraisal** 3 credits
The performance review and evaluation process will be studied including the design and implementation of performance appraisal systems. Various theories and models associated with effective performance systems will be reviewed.

HRS 252 Staff
***(W)Workforce Education and Training** 3 credits
(Cross-listed with HADM 317) The various organizational approaches to developing the skills and competencies of employees will be studied. Specific attention will be given to the assessment, design, development, implementation, and evaluation of training. A service learning component is integrated into this course.

HRS 284 Staff
Special Topics 3 credits
Selected topics in human resources are offered on a variable basis.

HRS 293 Staff
Research Applications in Human Resources 3 credits
An introduction to research methodology as applied to human resources issues and problems. Specific attention is given to descriptive, experimental, and quasi-experimental research methods.

HRS 340 Staff
Compensation and Benefits 3 credits
(Prerequisite: HRS 111 or permission of instructor) Both direct and indirect forms of compensation, as a component of organizational reward systems, will be studied including associated legal requirements. Ways of ensuring internal and external equity will be reviewed. A focus on job evaluation, salary surveys, health care benefits, insurance and pension will be included.

HRS 351 Staff
***(D)Recruitment, Selection and Staffing** 3 credits
(Prerequisite: HRS 111, HRS 112 or permission of instructor) The specific requirements that support effective identification and evaluation of prospective job candidates will be studied. Relevant legal requirements, testing procedures, and techniques for interviewing and screening will be reviewed. A service learning component is integrated into this course.

HRS 353 Staff
HR Information Systems 3 credits
(Prerequisite: HRS 111, HRS 112 or permission of instructor) Students will be introduced to various computer software applications, specific to the human resources field. Applications will require students to utilize spreadsheet, database, and statistical analysis tools.

HRS 380 Staff
***Human Resources** 1 credit
Career Seminar
(Prerequisite: HRS 111, HRS 112 or permission of instructor) Survey of current trends and occupations in Human Resources. Advanced planning for the required internship experience. Students will further develop their personal portfolio and critically reflect upon past learning experiences and future career plans.

HRS 390 Staff
Directed Study 3 credits
(Prerequisite: HRS 111, HRS 112 or permission of instructor) Students pursue independent study on a specific topic or participate in a research project.

HRS 440 Staff
***Human Resources Internship** 3 credits
(Prerequisite: HRS 380, HRS 111, HRS 112 or permission of instructor) The internship is a significant professional and educational experience that ends the third year of academic study and involves a supervised human-resources experience within an approved organizational setting. At least 120 hours of time must be at the selected organization and an additional 18 hours of an on-campus, faculty-led seminar. A final project and reflective journal will be required. A second internship will be made available for interested students.

HRS 480 Dr. Wallick
***Human Resources** 3 credits
Leadership Seminar
(Prerequisite: HRS 111, HRS 112, or permission of instructor). In this capstone course of the senior year, students will assess and develop their leadership skills and participate in an in-depth case study or simulation that integrates previous learning. An oral and written presentation will be required.

NURSING

DR. PATRICIA HARRINGTON, Chairperson

The purpose of the baccalaureate nursing program is the preparation of qualified persons for entry-level practice of professional nursing in hospitals and community health settings. The program also provides the academic foundations for advanced study in nursing.

High school graduates are admitted as freshmen into the program which leads to a Bachelor of Science degree with a major in Nursing. Total class enrollment is limited in consideration of educational and clinical resources. The curriculum can be completed in eight regular semesters of full-time study or four academic years.

The nursing program has the full approval of the Pennsylvania State Board of Nursing. The curriculum is based on a planned progression of courses so as to develop and build upon knowledge and skills at levels of increasing competency. Therefore, all required courses must be taken in sequence. For progression through the Nursing program, a minimum average grade of C must be attained in the prerequisite Natural Science courses (BIOL 110-111, CHEM 110-111, BIOL 210). A minimum grade of C must be attained in the prerequisite Quantitative course, PSYC 210, and in each Nursing course.

Final Grade For Nursing Courses With Concurrent Clinical Laboratory: The clinical-laboratory component of a Nursing course shall be on the basis of S, Satisfactory (Pass), or U, Unsatisfactory (Fail). If the student obtains an S in the clinical laboratory, the final grade in the course, which is entered on the permanent transcript, shall be the grade assigned for the lecture portion of the course. If the student does not obtain an S in the clinical laboratory, the final grade in the course, which is entered on the permanent transcript, shall be an F, no matter what grade was assigned for the lecture portion of the course. Both lecture and clinical components must be repeated if a grade of C-, D+, D or F is obtained in a Nursing course.

Prior to the junior and senior year, students enrolled in the Nursing program must present a certificate as evidence of having completed the Cardiopulmonary Resuscitation Basic Life Support course or Modular course offered by the American Red Cross or the American Heart Association. In order to graduate, Nursing majors are required to complete a minimum of 20 hours of community service during each academic year. Dexter Hanley College students will meet the service-learning requirement by completing major courses that have a service-learning component.

In addition to the general University tuition and fees, students majoring in Nursing assume the responsibility for the following: uniforms and other required clinical accessories, yearly physical examinations, entrance eye examination, immunizations, comprehensive achievement tests, liability insurance and any travel expenses incurred. Students must also provide their own transportation to and from agencies utilized for clinical laboratories, and have access to a car during their community-health clinical experiences in the senior year. Senior status in the Nursing Program is defined as completion of at least 100 credits including cognate and prerequisite courses for NURS 450 and NURS 452.

Applicants and students should be aware that Pennsylvania law prohibits licensure of individuals convicted of felonies related to controlled substance and may prohibit licensure if there is a conviction for any felonious act. For details, see the Admissions Brochure and the Student Handbook of the Department of Nursing. Prior to the junior year clinical courses, all Nursing majors are required to submit a Pennsylvania Child Abuse History Clearance and a Pennsylvania State Police Criminal Record Check to the Nursing Department. These clearances are maintained on the file in the Department of Nursing. Copies will be provided to clinical sites upon request.

Upon graduation the students will be eligible for admission to the examination for the registered-nurse licensure. The University of Scranton's Nursing program is accredited by

the National League for Nursing Accediting Commission.

The Department of Nursing also offers a flexible program for registered nurses and licensed practical nurses interested in returning to school to complete a bachelor's degree in nursing. An accelerated track is offered for students interested in pursuing graduate education and who meet the admission criteria for this option. For BS requirements, please see the Dexter Hanley College section.

NURSING

	Dept. and No.	Descriptive Title of Course	Credits	
		FIRST YEAR	**FALL**	**SPRING**
MAJOR	NURS 140[1]	Introduction to Nursing Concepts		3
GE NSCI	CHEM 110-111	Introduction to Chemistry	3	3
GE NSCI	BIOL 110-111	Structure & Function	4	4
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3	3
GE C/IL	C/IL 102	Computing and Information Literacy		3
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy	3	
GE S/BH	PSYC 110	Fundamentals of Psychology	3	
GE FSEM	INTD 100	Freshman Seminar	1	
GE PHED	PHED ELECT	Physical Education		1
			17	**17**
		SECOND YEAR		
MAJOR	NURS 250	Physical Assessment /Health Patterns	3	
MAJOR	NURS 251	Nursing Related to the Health Patterns		4
MAJOR	NURS 262	Pharmacology I		1
COGNATE	EXSC 220	Nutrition		2
COGNATE	BIOL 210	Introductory Medical Microbiology	3	
GE QUAN	PSYC 210	Psychological Statistics		3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	3	3
GE PHIL-T/RS	T/RS 121	Theology I	3	
GE HUMN	HUMN ELECT	Humanities Electives	6	
GE S/BH	PSYC 225[3]	Abnormal Psychology		3
			18	**16**
		THIRD YEAR		
MAJOR	NURS 350-371	Nursing Care of the Adult I, II	5.5	5.5
MAJOR	NURS 352	Mental Health Nursing	5.5	
MAJOR	NURS 373	Nursing Care of the Childbearing Family		5
MAJOR	NURS 360-361	Pharmacology II, III	1	1
GE PHIL-T/RS	PHIL 212[3]	Medical Ethics	3	
GE ELECT	PSYC 221[3]-ELECT	Childhood and Adolescence-Elective	3	3
GE HUMN	HUMN ELECT	Humanities Elective		3
			18	**17.5**
		FOURTH YEAR		
MAJOR	NURS 450	Nursing Care of the Adult III	5.5	
MAJOR	NURS 452	Nursing Care of Children and Adolescents	4.5	
MAJOR	NURS 493	Research in Nursing	3	
MAJOR	NURS 471	Community Health Nursing		3.5
MAJOR	NURS 473[2]	Synthesis of Leadership Concepts in Nursing		3
MAJOR	NURS 475[2]	Critical Care Nursing		3
GE HUMN	HUMN ELECT	Humanities Elective		3
GE ELECT	FREE ELECT	Free Electives	3	3
GE PHED	PHED ELECT	Physical Education	1	1
			17	**16.5**
				Total: 137 CREDITS

[1] fall or spring semester
[2] ROTC option available
[3] Recommended by the department

NURS 100 Dr. Garrett, Prof. Nicoteri,
Family Health Staff
3 credits

(For non-Nursing majors) Concepts and principles related to the promotion and maintenance of optimal family health. Considers factors pertinent to health needs and health practices throughout the life cycle.

NURS 111 Drs. Farrell, Maddox
(D)Women's Health 3 credits

(Open to all students) Course focuses on historic, physiological, social, cultural, emotional and economic issues affecting women's health. The course explores strategies to empower women's use of health-care services. Class members will be expected to participate actively in all discussions.

NURS 112 Staff
Sexual Development Through the Life Span 3 credits

(Open to all students) Impact on sexual roles and expression, and health and social issues as they relate to sexual function. Emphasis is placed on developing sexual awareness of the student. Three hours lecture.

NURS 113 Staff
Interpretation: Cardiac Rhythms 1 credit

(Prerequisites: NURS 350 or NURS 380, C/IL 102) Focus on the role of the nurse in providing care to individuals experiencing common cardiac dysrhythmias. One hour lecture.

NURS 114 Staff
Cardiopulmonary Critical Care Nursing 3 credits

(Prerequisites: NURS 350 or NURS 380, C/IL 102) Focus on the professional nurse's role in providing care to critically ill patients. Emphasis on nursing care for alterations in cardiopulmonary function, including common cardiac dysrhthymias.

NURS 140 Staff
(W)Introduction to Nursing Concepts 3 credits

An exploration of the core concepts of the client, health, nursing and health patterns. Historical, philosophical, and social development of nursing and the role of the professional nurse are presented. Understanding of health and health continuum in the broader perspective of the human person, the physiological, psychological, developmental, and socio-cultural modes. Introduction of the nursing process as it relates to the development of cognitive, interpersonal, and psychomotor skills to assist clients to attain and maintain an optimal level of health. **Service-learning 20 hours.** Three hours lecture.

NURS 213 Dr. Muscari
(W)Child and Adolescent Health Promotion 3 credits

(Recommended Prerequisite: PSYC 221, but open to all students) Focus on the professional's role as advocate, care-giver and/or teacher in the promotion of health for children and adolescents, directly through health maintenance and prevention and indirectly through health-care policy.

NURS 241 Dr. Zalon
(W)Perspectives in Professional Nursing 3 credits

(Prerequisites: Sophomore standing in the Nursing Program, RN and LPN students only) Perspectives in professional nursing explores concepts incorporated in the philosophy, organizing framework and curriculum structures of the Nursing program. Integration of the health patterns and nursing process in the delivery of professional nursing care is introduced. Pertinent issues impacting on the nursing profession are addressed.

NURS 242 Dr. Maddox, Staff
Nursing Related to the Assessment of Health Patterns 3 credits

(Prerequisites: Sophomore standing, NURS 241, RN and LPN students only) Focus on the professional nurse's role as caregiver in assessing, diagnosing and planning interventions of adaptive health patterns in individuals. Application of the nursing process to well persons and to individuals and families with alterations in health patterns. Exploration of concepts for planning holistic health care. Two hours lecture and three hours laborotory.

NURS 250 Dr. Muscari, Staff
Physical Assessment Related to Health Patterns 3 credits
(Prerequisites: BIOL 110-111, Sophomore standing in Nursing program) Development of beginning skill in the basic physical-assessment techniques necessary for the promotion of optimal health as a care-giver. Focus on the professional nurse's role in assessing the physiological dimension of adaptive health patterns in individuals with a stable health status. **Service Learning: 10 hours.** Two hours lecture and three hours laboratory.

NURS 251 Dr. Harrington, Staff
Nursing Related to Health Patterns 4 credits
(Prerequisites: NURS 140, NURS 250; co-requisite: NURS 262) Focus on the professional nurse's role in promoting the individual's health status, utilizing the developmental, physiological, psychological and sociocultural dimensions of functional health patterns. Development of beginning skills in therapeutic nursing interventions. **Service-learning: 10 hours.** Two hours lecture, six hours laboratory

NURS 262 Drs. Hanson, Hudacek, Staff
Pharmacology I 1 credit
(Prerequisites: CHEM 110-111, BIOL 110-111, BIOL 210) Principles of pharmacology and specific drug groups. Emphasis is placed on drug actions, side effects, dosages and nursing responsibilities.

NURS 310 Staff
(D)Understanding Transcultural Health Care 3 credits
This course will focus on exploring values, beliefs, and lifestyles of diverse cultural groups in order to broaden the student's perception and understanding of health and illness and the variety of meanings these terms carry for members of differing groups.

NURS 311 Staff
Computer Applications in Nursing 3 credits
(Prerequisite: Sophomore standing in Nursing program, LPN or RN) Designed for Nursing majors or nurses who wish to learn computer capabilities for nursing applications in ways that do not involve programming. Emphasis is on interactive computer experience as an introduction to disk-operating systems, and word processing, computer-assisted instruction, file management, database management system, care-planning, software evaluation and research access.

NURS 312 Dr. Maddox, Staff
(D)Nursing the Older Adult 3 credits
(Prerequisite: Junior standing in Nursing, OT, or PT program) Focus on the professional nurse's role of care-giver, advocate and teacher in promoting and maintaining adaptive responses of the older adult experiencing alterations in health patterns. Emphasis placed on multidimensional assessment factors and interventions in meeting bio-psycho-social needs.

NURS 314 Dr. Garrett
Principles of Nursing Ethics 3 credits
(Prerequisites: Philosophy 210, Junior standing in Nursing Program, LPN or RN track) Addresses ethical issues in the clinical nursing practice of the professional nurse as care-giver, advocate, teacher, leader/manager. The focus is on the decisions made regarding patient care. Three hours lecture.

NURS 350 Drs. DiMattio, Zalon, Staff
Nursing Care of the Adult I 5.5 credits
(Prerequisites: CHEM 110-111, BIOL 210, NURS 251; co-requisites: NURS 360 and NURS 352) The first of three courses that focuses on physiological and psychological adaptation to dysfunctional health patterns. Emphasis is placed on the nursing process and functional health patterns as a framework for practice. Pathophysiology and nursing care related to alterations in oxygenation, perfusion and metabolism, and the perioperative experience are included. Clinical experiences are designed to develop the professional nursing role of care giver, advocate and teacher in promoting and restoring health. **Service-learning: 10 hours.** Three hour lecture, 15 hrs clinical lab/week (for seven weeks) alternate with NURS 352.

NURS 352 Dr. Farrell, Staff
Mental Health Nursing 5.5 credits
(Prerequisites: CHEM 110-111, BIOL 110-111, BIOL 210, NURS 251; co-requisites: NURS 360, NURS 350) The focus is on psychological adaptation to dysfunctional health patterns. Emphasis is placed on the nursing process and functional health patterns as a framework for practice. Psychopathology and nursing care of individuals and families experiencing alterations in mental health are explored. Clinical experiences are designed to develop the professional nursing role of care giver, advocate and teacher in promoting and restoring mental health. Three hours lecture, 15 hrs clinical lab/week (for seven weeks) alternate with NURS 350.

NURS 360 Prof. Nicoteri, Staff
Pharmacology II 1 credit
(Prerequisite: NURS 262) Principles of pharmacology and specific drug groups related to alterations in the sleep-rest, activity-exercise, self-perception/self-concept health patterns. Emphasis is placed on drug actions, side effects, dosages, and nursing responsibilities. One hour lecture.

NURS 361 Dr. Hudacek, Staff
Pharmacology III 1 credit
(Prerequisite: NURS 360) Principles of pharmacology and specific drug groups related to alterations in the nutrition-metabolic, sexuality-reproduction, role-relationship, cognitive-perceptual, and elimination health patterns. Emphasis is placed on drug actions, side effects, dosages, and nursing responsibilities. One hour lecture.

NURS 371 Dr. Carpenter, Staff
Nursing Care of the Adult II 5.5 credits
(Prerequisites: NURS 350, NURS 352; co-requisites: NURS 361, NURS 373) The second of three courses that focus on physiological and psychological adaptation to dysfunctional health patterns. Emphasis is placed on the nursing process and functional health patterns as a framework for practice. Pathophysiology and nursing care related to alterations in metabolism, nutrition, and immunity are included. Clinical experiences are designed to develop the professional nursing role of care giver, advocate and teacher in promoting and restoring health. **Service-Learning: 10 Hours.** Three hours lecture, 15 hours clinical lab/week (for 7 weeks) alternate with NURS 373.

NURS 373 Dr. Farrell, Staff
Nursing Care of the Childbearing Family 5 credits
(Prerequisites: NURS 350, NURS 352; co-requisites: NURS 361, NURS 371) Focus is on the physiological and psychological adaptation to functional and dysfunctional health patterns in the child-bearing family. Emphasis is placed on the nursing process and functional health patterns as a framework for practice. Pathophysiology and nursing care related to childbearing, childbirth and their complications are addressed. Pathophysiological processes related to alterations in sexual health are also included. Clinical experiences are designed to develop the professional nursing role of care giver, advocate and teacher in promoting and restoring health. Three hours lecture, 12 hours clinical lab/week (for 7 weeks) alternate with NURS 371.

NURS 384 Staff
Perioperative Nursing 3 credits
(Prerequisite: NURS 350) This course presents concepts and information essential for perioperative nursing practice. Content includes essentials of perioperative procedures in relation to nurses' planning and management of the patient's surgical experience. Precepted clinical experiences are provided in various phases of the perioperative nursing: preoperative, operative and post-anethesia care. Emphasis is placed on the development of beginning skills in the operative setting. One hour lecture and six hours laboratory.

NURS 405 Dr. Muscari
Health Writing 3 credits
for Publication
(Cross-listed with NURS 505; open to all Junior and Senior students) This course enables students to enhance their writing skills by utilizing principles of effective writing as they relate to health issues. Students select projects to develop from idea to polished manuscript for both a professional journal and a consumer newspaper/magazine. *On-line, web-based course.*

NURS 410 Dr. Zalon
Nursing Management 3 credits
Study of the management process in nursing settings with a focus on the planning, implementation and delivery of nursing care in complex organizations. Focus is on the collaborative role of nursing within the organization and the analysis and resolution of problems. Three hours lecture.

NURS 450 Dr. Hudacek, Staff
Nursing Care of the Adult III 5.5 credits
(Prerequisites: NURS 371, NURS 373, NURS 361; co-requisites: NURS 452) This is the final course in a three-course sequence that focuses on physiological and psychological adaptation to dysfunctional health patterns. Emphasis is placed on the nursing process and functional health patterns as a framework for practice. Pathophysiology and nursing care related to alterations in mobility, elimination, cognition, and perception are included. Clinical experiences are designed to develop the professional nursing roles of care giver, advocate and teacher in promoting and restoring health. **Service-Learning: 10 Hours.** Three hours lecture, 15 hours clinical lab/week for seven weeks, alternate with NURS 452.

NURS 452 Dr. Muscari, Staff
Nursing Care of 4.5 credits
Children and Adolescents
(Prerequisites: NURS 371, NURS 373, NURS 361; co-requisite: NURS 450) The focus is on the physiological adaptation to functional and dysfunctional health patterns in children and adolescents. Emphasis is placed on the nursing process and functional health patterns as a framework for nursing practice. Health promotion and the pathophysiology and nursing care related to the disorders of childhood are included. Clinical experiences are designed to develop the professional nursing role of care giver, advocate and teacher in the promotion and restoration of health. Three hours lecture, nine hours clinical lab/week for seven weeks, alternate with NURS 450.

NURS 471 Dr. Maddox, Staff
(D)Community Health Nursing 3.5 credits
(Prerequisites: NURS 450, NURS 452; co-requisites: NURS 473, NURS 475) The focus is on the professional nursing roles of care giver, advocate, teacher and leader/manager in promoting adaptive responses to functional and dysfunctional health patterns in individuals, families, communities and groups. The student synthesizes prior knowledge of Gordon's Health Patterns and all phases of the nursing process in meeting the health-care needs of community-based clients in diverse population settings. **Service-Learning 10 hours.** 4.25 hours lecture/week for five weeks; 18 hours clinical lab/week for five weeks (alternate with NURS 473 and 475)

NURS 473 Dr. Zalon, Staff
Synthesis of Leadership 3 credits
Concepts in Nursing
(Prerequisites: NURS 450, NURS 452; co-requisites: NURS 471, NURS 475) The focus is on the professional nurse's role as care giver, advocate, teacher and leader/manager in promoting, restoring, and maintaining adaptive responses in individuals experiencing complex alterations in functional health patterns. Continued use of the nursing process and the development of case- management skills in implementing and evaluating nursing care of the individual, family, community, and groups in collaboration with the nursing and interdisciplinary health teams are emphasized. Three hours/week lecture for 4.5 weeks; 18 hours clinical lab/week for 4.5 weeks, alternate with NURS 471 and 475.

NURS 475 Dr. Desmond, Staff
Critical Care Nursing 3 credits
(Prerequisites: NURS 450, NURS 452; co-requisites: NURS 471, NURS 473) The focus is on physiological and psychological adaptation to complex dysfunctional health patterns. Emphasis is placed on the nursing process and functional health patterns as a framework for practice. Pathophysiology and nursing care related to complex alterations in health patterns are included. Clinical experiences are designed to develop the professional nursing role of care giver, advocate, teacher, and leader/manager in promoting, restoring and maintaining health. Three hour lectures/week for 4.5 weeks; 18 hours clinical lab/week for 4.5 weeks, alternate with NURS 471 and 473.

NURS 483 Dr. Carpenter, Staff
Independent Study in Nursing 3 credits
(Registered Nursing Students only; Prerequisites: Senior standing in the Nursing program, NURS 493) An independent project of academic or professional nature in an area specific to professional nursing. Students develop and complete a specific project and work on a one-to-one basis with a faculty member in the Department of Nursing.

NURS 493 Drs. Carpenter, DiMattio, Staff
(W)Research in Nursing 3 credits
(Prerequisites: Senior standing in the Nursing program, PSYC 210) Introduction to and application of the principles and process of research in professional nursing practice. Study of research design, data-collection techniques, interpretation and critique of nursing research, literature, and reports and the development of the ability to become a discriminating consumer of nursing research. Three hours lecture.

* The following option is available for ROTC Nurse cadets. Three credits are awarded for successful completion of the ROTC Nurse Summer Training Program (NSTP) in place of NURS 473 Lab (2 cr) & NURS 475 Lab (1 cr).

OCCUPATIONAL THERAPY

DR. RHONDA WASKIEWICZ, Chairperson

The Department of Occupational Therapy at The University of Scranton offers a five-year, entry-level, Master of Science degree in Occupational Therapy. The Occupational Therapy curriculum is based on a frame of reference that is developmental, humanistic, and holistic in nature, and that emphasizes optimal function throughout the life span. The program is integrated with a liberal arts and science foundation, and is designed to prepare strong, generalist, entry-level practitioners with the capacity for critical thinking, creative analysis and clinical reasoning.

Admission to the program is normally open to first-time incoming freshmen. Applicants are selected on a competitive basis, with emphasis placed on high school record, standardized test scores, extracurricular activities, and letters of recommendation. Observation and/or volunteer experience in occupational-therapy settings is required and must be documented. Transfer students are considered on an individual, space-available basis

The course work is sequenced in a planned progression in order to build upon and develop knowledge and skills at increasing levels of complexity, competence, and integration. A minimum grade of C (2.00) must be attained in every undergraduate cognate and Occupational Therapy course. In addition, a service-learning component is integrated into one OT course during each undergraduate semester, with a minimum of 10 hours required per course.

Students usually enter this program as freshmen, proceed through four years of undergraduate study and receive a Bachelor of Science degree in Health Sciences. A minimum, overall, undergraduate GPA of 2.75 is required in order to advance into the fifth or graduate year of the program; and a minimum, overall GPA of 3.00 must be achieved and maintained for all graduate courses. Required OT Level I and Level II Internships will be graded on a Pass/Fail basis. Upon completion of graduate requirements, a degree of Master of Science in Occupational Therapy is awarded.

Overall framework for the fifth (Master's) year is Professional Leadership, with a focus on interdisciplinary practice and includes: development of enhanced professional behaviors, advanced OT theory, interpersonal dynamics and leadership skills, research and efficacy-based practice, and advanced clinical skills. The design is a full, five-year, academic program which allows sufficient time to include all necessary components, balanced in proper sequence, and without overloading any one semester.

Beginning in the third year, the OT Level I Clinical courses are scheduled immediately following the OT Practice course in that area to enhance the integration of theory and practice, to ensure sufficient numbers of clinical placements in the students' home locations, and to avoid conflict with the standard academic semester schedule. Courses in the OT graduate year serve to actualize the expanded curricular themes of professional leadership and interdisciplinary practice, enhanced professional behaviors and interpersonal dynamics, advanced OT theory, applied clinical research, and advanced clinical practice.

One of the two required OT Level II Internships follows completion of the undergraduate academic coursework; therefore, students are better prepared for full-time, supervised practice. Also, students enter the academic portion of the Master's year having had some concentrated, extended, full-time clinical experiences, which make for better integration of theory and practice, and serve to enrich the classroom learning and teaching environment. The second, required, full-time internship follows completion of the fifth or graduate year of the program, and upon completion graduates are prepared for entry-level practice in occupational therapy. After the required clinical work is finished, a student may choose to participate in a Level II Internship in a specialty area of practice. Students are responsible for their transportation and travel costs to and from assigned clinical and internship settings, and should expect to pay room and board expenses during the Level II experiences.

The Occupational Therapy Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA's phone number is (301) 652-AOTA, and their web address is www.aota.org. Graduates of the program are able to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination.

The normal length of time for completion of the program is five and one-quarter years. All OT students must complete Level II Fieldwork within 24 months following completion of the academic portion of the program. Students will receive the MS in OT degree following completion of all academic and clinical requirements.

OCCUPATIONAL THERAPY

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FIRST YEAR		
MAJOR	OT 140	Introduction to OT	1	
MAJOR	OT 141	OT Theoretical Concepts		3
GE NSCI	BIOL 110-111[1]	Structure-Function of Human Body	4	4[1]
GE S/BH	SOC 110	Introduction to Sociology		3
GE S/BH	PSYC 110	Fundamentals of Psychology	3	
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	3	3
GE C/IL	C/IL 102	Computing and Information Literacy	3	
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	3	3
GE FSEM-PHED	INTD 100-PHED	Freshman Seminar-Physical Education	1	1
			18	**17**
		SECOND YEAR		
MAJOR	OT 240-241	Activity Analysis I and II	3	3
MAJOR	OT 256	Human Anatomy for OT	4	
MAJOR	OT 275	Clinical Kinesiology		3
COGNATE	PSYC 221-222	Child & Adol.-Adult & Aging	3	3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II		6
GE HUMN	HUMN ELECT	Humanities Electives	6	3
GE PHED	PHED ELECT	Physical Education	1	
			17	**18**
		THIRD YEAR		
MAJOR	OT 346-347	Pathological Conditions I and II	3	3
MAJOR	OT 356	Functional Neuroanatomy	3	
MAJOR	OT 360	OT Practice I (Pediatrics)	3	
MAJOR	OT 361	OT Practice II (Psychosoc. Rehab.)		3
MAJOR	OT 380[2]	OT Level I Clinical-I (Peds.)		1(Int)[2]
MAJOR	OT 381[2]	OT Level I Clinical-II (Psysoc.)		I(Sum)[2]
COGNATE	HS 341-HADM 112	Group Dynamics-Health Systems	3	3
COGNATE	HS 333	Multiculturalism in Human Srvs.	3	
GE QUAN	PSYC 210	Psychological Statistics		3
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3
GE HUMN	HUMN ELECT	Humanities Elective		3
GE PHED	PHED ELECT	Physical Education	1	
			16	**2** **18**
		FOURTH YEAR		
MAJOR	OT 440	Mgt. and Supv. of OT Services		3
MAJOR	OT 451	Hand Rehabilitation	2	
MAJOR	OT 460	OT Practice III (Physical Rehab.)	3	
MAJOR	OT 461	OT Practice IV (Geriatrics)		3
MAJOR	OT 475	Advanced Therapeutic Techniques		3
MAJOR	OT 480[2]	OT Level I Clinical-III (Phys.)		1(Int)[2]
MAJOR	OT 493	Research Methods in OT	3	
GE ELECT	FREE ELECT	Free Electives	6	6
			14	**1** **15**
		FIFTH YEAR (Summer)		
MAJOR	OT 581[3]	OT Level II Internship-I (Psysoc.)		6 (Sum)
or				
MAJOR	OT 582[3]	OT Level II Internship-II (Phys.)		
		FIFTH YEAR		
MAJOR	OT 501	Leadership in Occupational Therapy	3	
MAJOR	OT 502	Advanced OT Theory		3
MAJOR	OT 560	Advanced Interpersonal Dynamics	3	
MAJOR	OT 575	Advanced Clinical Practice	3	
MAJOR	OT 583	OT Level II Internship-III (Optional)		4
MAJOR	OT 593	OT Applied Clinical Research I	3	
MAJOR	OT 594	OT Applied Clinical Research II		3
COGNATE	HADM 504	Human Resources Management	3	
COGNATE	HADM 508	Leadership in Health Care Organizations		3
			12-16	**12**
		SIXTH YEAR (Summer)		
MAJOR	OT 581[3]	OT Level II Internship-I (Psysoc.)		6 (Sum)
or				
MAJOR	OT 582[3]	OT Level II Internship-II (Phys.)		

Total: 170-172 CREDITS

[1] Extra Science Credits
[2] OT Level I Clinical I, II, III are each a minimum of two weeks, full-time
[3] OT Level II Internship I, II are required and each a minimum of 12 weeks full-time in Psychosocial Rehabilitation and Physical Rehabilitation. Time period scheduled for individual students may vary as determined by the Department, and with consideration of student needs and circumstances.

OT 140 Prof. Ciucci
Introduction to Occupational Therapy 1 credit
An introduction to the profession of occupational therapy, including an overview of history, philosophical bases, standards and ethics, and current and future directions for practice. Clinical areas of focus and practice settings are presented with particular emphasis placed on the role of the occupational therapist. Majors only. One two-hour seminar/week.

OT 141 Prof. Brady
Occupational Therapy Theoretical Concepts 3 credits
A comprehensive review of occupational- therapy theoretical frames of reference and models of practice, with emphasis on an analysis of their history, philosophical foundations, and applications to practice. The focus is on human occupation and adaptation, and its multicultural aspects. Three hours lecture/week, and a minimum total of **10 hours of service learning.**

OT 240 Prof. Brady
Activity Analysis I 3 credits
Analysis, theory and application of activities and media used in occupational therapy treatment. Course will consider developmental parameters, and include self-care, work, and leisure aspects for the child and adolescent. Adaptation and grading of purposeful activities for therapeutic intervention, and practice in presenting and teaching activities will be included. One hour lecture, four hours lab/week, and a minimum total of **10 hours of service learning.**

OT 241 Prof. Brady
Activity Analysis II 3 credits
(Prerequisite: OT 240) Analysis, theory, and application of additional activities and media used in occupational-therapy treatment. Course will consider developmental parameters, and include self-care, work, and leisure aspects for the young and older adult. Adaptation and grading of purposeful activities for therapeutic intervention, and practice in presenting and teaching activities will be included. One hour lecture, four hours lab/week, and a minimum total of **10 hours of service learning.**

OT 256 Dr. Pokowicz
Human Anatomy for Occupational Therapy 4 credits
A regional in-depth study of human anatomy with major emphasis on functional anatomy. This will be accomplished through the study of prosected human specimens and surface anatomy. Three hour lecture, two hour lab/week.

OT 275 Prof. Wolf
Clinical Kinesiology 3 credits
(Prerequisites: BIOL 110-111, OT 256) Application of the principles of functional anatomy with emphasis on normal and abnormal movement. Measurement techniques for range of motion and muscle testing are presented, with emphasis on the movement and strength requirements found in self-care, work, and leisure activities. Concepts are integrated in lab experiences. Two hours lecture, two hours lab/week.

OT 346 Dr. Ikiugu
Pathological Conditions I 3 credits
A review of pathological conditions seen in occupational-therapy practice, including: diagnosis, etiology, progression, performance deficits, treatment, prognosis, and functional outcomes. Emphasis placed on examining developmental/pediatric disabilities, and psychosocial dysfunction. The promotion of health, prevention, and implications for the individual, family, and society are discussed. Three hours lecture/week.

OT 347 Prof. Ciucci
Pathological Conditions II 3 credits
(Prerequisite: OT 346) A review of pathological conditions seen in occupational-therapy practice, including: diagnosis, etiology, progression, performance deficits, treatment, prognosis, and functional outcomes. Emphasis placed on examining adult physical dysfunction, and geriatric difficulties. The promotion of health, prevention, and implications for the individual, family, and society are discussed. Three hours lecture/week.

OT 356 Prof. Wolf
Functional Neuroanatomy 3 credits
(Prerequisites: OT 256, OT 275) An overview of applied neuroanatomy and function, with emphasis on sensory, perceptual, and motor performance. Normal structure and function are discussed, together with nervous-system dysfunction, as applied to self-care, work, and leisure activities related to OT practice. Two hours lecture, two hours lab/week.

OT 360 Dr. Reinson
Occupational Therapy 3 credits
Practice I: Pediatrics
(Prerequisites: OT 241, OT 275) An overview of theoretical frames of reference, evaluation, and treatment intervention strategies used to enhance the function of infants, children, and other individuals with developmental disabilities. Methods of observation, assessment, and treatment approaches are introduced and practiced in lab simulations and field trips to area facilities. Two hours lecture, two hours lab/week, and a minimum total of **10 hours of service learning.**

OT 361 Dr. Ikiugu
Occupational Therapy 3 credits
Practice II:
Psychosocial Rehabilitation
(Prerequisite: HS 341) An overview of theoretical frames of reference, evaluation, and treatment intervention strategies used to enhance the function of individuals with psychosocial dysfunction. Methods of observation, assessment, and treatment approaches are introduced and practiced in lab simulations and field trips to area facilities. Two hours lecture, two hours lab/week and a minimum total of **10 hours of service learning.**

OT 380 Prof. Burns
Occupational Therapy 1 credit
Level I Clinical - I: Pediatrics
(Prerequisites: OT 346, OT 356, OT 360) Directed observation and supervised participation in the occupational-therapy process in a pediatric/developmental disabilities setting. Emphasis on the integration of theory and practice. Intersession, two weeks, full-time.

OT 381 Prof. Burns
Occupational Therapy 1 credit
Level I Clinical - II: Psychosocial Rehabilitation
(Prerequisites: OT 347, OT 361, OT 380) Directed observation and supervised participation in the occupational-therapy process in a psychosocial-rehabilitation setting. Emphasis on the integration of theory and practice. Summer, two weeks, full-time.

OT 440 Dr. Waskiewicz
Management and Supervision 3 credits
of Occupational-Therapy Services
An application of major management principles to the provision of occupational-therapy services, with emphasis on the administrative and supervisory requirements in managing an occupational therapy department. Information provided concerning program planning, recruitment, marketing, budgeting, supervision, documentation, evaluation, reimbursement, and quality assurance. Three hours lecture/week.

OT 451 Prof . Wolf
Hand Rehabilitation 2 credits
(Prerequisites: OT 256, OT 275) An in-depth review of functional anatomy of the hand and arm, with emphasis on rehabilitation principles and basic splinting techniques. Theoretical concepts, evaluation, and fabrication procedures are integrated in lab experiences. One hour lecture, two hours lab/week.

OT 460 Prof. Ciucci
Occupational Therapy Practice III:
Physical Rehabilitation 3 credits
(Prerequisites: PT 256, OT 275, OT 360, OT 361) An overview of theoretical frames of reference, evaluation, and treatment intervention strategies used to enhance the function of individuals with major physical disabilities. Emphasis placed on the neurodevelopmental, biomechanical, and rehabilitative approaches. Methods of observation, assessment, and treatment techniques are introduced and practiced in lab simulations and field trips to area facilities. Two hours lecture, two hours lab/week, and a minimum total of **10 hours of service learning.**

OT 461 Dr. Ciaravino
Occupational Therapy 3 credits
Practice IV: Geriatrics
(Prerequisite: OT 460) An overview of theoretical frames of reference, evaluation, and treatment intervention strategies used to enhance the function of the elderly. Emphasis placed on understanding the biopsychosocial changes, characteristics, and needs of older persons. Methods of observation, assessment, and treatment approaches are introduced and practiced in lab simulations and field trips to area facilities. Two hours lecture/two hours lab/week, and a minimum total of **10 hours of service learning.**

OT 475 Prof. Ciucci
Advanced Therapeutic 3 credits
Techniques
(Prerequisites: OT 451, OT 460, OT 480) Advanced theoretical concepts and treatment applications designed to provide exposure to the most current areas of focus in practice. The approaches reviewed may include advanced group work, neurodevelopmental treatment, sensory integration, joint mobilization, industrial medicine, adaptive seating, and assistive technology. Two hours lecture, two hours lab/week.

OT 480 Prof. Burns
Occupational Therapy 1 credit
Level I Clinical - III:
Physical Rehabilitation
(Prerequisites: OT 381, OT 451, OT 460) Directed observation and supervised participation in the occupational therapy process in a physical rehabilitation setting. Emphasis on the integration of theory and practice. Intersession, two weeks, full-time.

OT493 Drs. Ikiugu, Waskiewicz, Reinson
Research Methods 3 credits
in Occupational Therapy
(Prerequisite: PSYC 210) This course is the first in a series of three courses that comprise the **capstone experience**. It provides an introduction to research design, data collection, analysis, and interpretation of findings. Emphasis placed on critical review of occupational-therapy research studies, application to clinical practice, quantitative, and qualitative methods. Concepts are integrated through the preparation of a research proposal. Three hours lecture/week.

OT 501 Dr. Waskiewicz
Leadership in 3 credits
Occupational Therapy
Extensive analysis of the past, present, and future of leadership in occupational therapy. This course will examine the historical influences of the profession's founders, current trends in occupational therapy leadership, and possibilities for leadership evolution. Identification of the tools that constitute the artifacts of occupational therapy's leadership culture will be interwoven throughout the course. Original works by past and present leaders in occupational therapy will provide opportunity to analyze the personal and professional development of individual leadership qualities and styles. Three hours lecture/week.

OT 502 Dr. Ikiugu
Advanced Occupational 3 credits
Therapy Theory
(Prerequisite: OT 581 or OT 582) In-depth analysis of how theory and knowledge is constructed, and its effect on practice. This course will examine factors that influence the development of OT theory and knowledge by demonstrating how basic inquiry leads to application and the refinement of what constitutes best practice. A review of how occupational-therapy paradigms have been established and changed over time, and how these changes have influenced occupational-therapy practice will be presented. Particular attention will be paid to the cultural, economic, and demographic motivators of theory development and application. Three hours lecture/week.

OT 560 Dr. Ciaravino
Advanced Interpersonal Dynamics 3 credits

A review of the concepts and aspects of intrapersonal, interpersonal, and group dynamics provides a foundation for advanced study of human interactions between the disabled and the abled. An in-depth analysis of disability from the vantage point and perspective of the disabled is explored. Contemplation of this very diverse culture, as seen through the lenses of individuals with disabilities, is offered to enhance the analysis and understanding of self and others.Theoretical approaches and concepts are integrated through directed group activities. Two hours lecture, two hours lab per week or equivalent.

OT 575 Staff
Advanced Clinical Practice 3 credits

(Prerequisites: OT 581 or OT 582) In-depth exposure to selected areas that represent the current focus of advanced practice in occupational therapy. The areas of practice examined in the course will include community-based programs, non-medical settings, alternative care, and natural environments. These practice areas will examine the role of occupation for individuals and families in the context of real life. Additionally, the course will address theoretical concepts and advanced practice systems. The Model of Disabilities and its effect on the individual and society will be explored through the framework of advocacy and relationship-based care. Two hours lecture, two hours lab per week or equivalent.

OT 581 Prof. Burns
OT Level II Internship - I: Psychosocial Rehabilitation 6 credits

(Prerequisite: completion of all undergraduate coursework or academic graduate coursework) Full-time, supervised, level II clinical experience in the area of psychosocial rehabilitation. In order to be eligible to sit for the national certification examination for Occupational Therapist Registered, the student must achieve at least the minimum scores on the AOTA Fieldwork Evaluation. Summer, following the fourth or fifth year of the program, 12 weeks minimum, full-time.

OT 582 Prof. Burns
OT Level II Internship - II: Physical Rehabilitation 6 credits

(Prerequisites: completion of all undergraduate coursework or academic graduate coursework) Full-time, supervised, level II clinical experience in the area of physical rehabilitation. In order to be eligible to sit for the national certification examination for Occupational Therapist Registered, the student must achieve at least the minimum scores on the AOTA Fieldwork Evaluation. Summer, following the fourth or fifth year of the program, 12 weeks minimum full-time.

OT 583 Prof. Burns
OT Level II Internship - III: Specialty (Optional) 4-6 credits

(Prerequisites: OT 581, OT 582) Full-time, supervised, level II clinical experience in a specialty area of practice. Arranged on an availability basis. Fall, following the fifth year of the program, eight to 12 weeks, full-time.

OT 593 Drs. Ciaravino, Waskiewicz, Ikiugu
OT Applied Clinical Research I 3 credits

(Prerequisites: OT 493, OT 581 or OT 582) This course is the second of three coursaes that comprise the **capstone experience**. This is designed to promote entry-level research competencies in health-care, education, and community settings by engagement in actual research activities that are drawn upon and amplified in the research process under the direction of a research advisor. The student will gain first-hand knowledge of three major roles applicable to this level, including consumer of research, assistant to a research investigator, and/or a beginning research investigator. Three hours seminar, advising session or equivalent/week.

OT 594 Drs. Reinson, Waskiewicz, Ikiugu, Ciaravino
OT Applied Clinical Research II 3 credits

(Prerequisite: OT 593) This course is the third and last course in the **capstone experience**. It involves the completion of a systematic research study that is based on a body of knowledge or theoretical approach, and designed to contribute to the field of occupational therapy. This form of scientific inquiry is embedded in an investigation that utilizes quantitative and/or qualitative scientific methods and research designs to address specific practice-based questions. The focus of the research study is to contribute to the knowledge base, gain and disseminate information necessary for sound decision-making regarding issues of concern to the profession of occupational therapy. Three hours seminar, advising session or equivalent/week.

Capstone Experience: Each student is required to propose and execute a quality Masters-level research project that culminates in a thesis. This process begins in the first semester of senior year with OT 493, Research Methods. During the second semester of senior year, students will make application to either the Departmental or Institutional Review Board. The thesis is written and publicly defended during the graduate year. Six credits are awarded for the thesis via a two-semester course sequence, OT 593 and OT 594.

PHYSICAL THERAPY

DR. EDMUND M. KOSMAHL, Chairperson

The Department of Physical Therapy offers a five-year Master's Degree in Physical Therapy (MPT). This degree prepares graduates to enter the profession as physical therapists. Graduates receiving the MPT degree are qualified to sit for licensure examination in all 50 states. The MPT degree program is fully accredited by the Commission on Accreditation in Physical Therapy Education.

The physical therapy (PT) curriculum is designed to prepare highly competent and ethical entry-level physical therapists who can provide evidence-based physical therapy services. Graduates are prepared for direct patient care, and for the education of patients and their families, peers, health professionals, and the lay community. Graduates are also prepared to provide practice management and consultation services.

Admission to the PT program is competitive because of available academic and clinical resources. One of the admission requirements is documentation of at least 10 hours of patient-related PT exposure, and a positive recommendation from the supervising licensed physical therapist on the documentation form available from the Admissions Department. Successful applicants usually possess strong records in the following areas: science and math grade point average (GPA), scholastic aptitude test scores, extra-curricular leadership - participation - community service, PT exposure and positive recommendation(s), overall GPA.

Most students are admitted as freshmen. Freshman-admit PT majors must maintain full-time status and follow the curriculum (including all internships) as described in the catalog. Freshman-admit PT majors complete the MPT degree program in five-years. Freshman-admit PT majors must enroll at the University of Scranton for all science cognate and major courses. **Advanced placement (AP) credits cannot be used to satisfy the biology, chemistry, physics, or PT course requirements specified in the PT curriculum.**

Applicants with previous college experience are admitted as transfer students. Placement in the curriculum for transfer students is evaluated individually for each applicant. Transfer students are expected to enroll as full time students beginning with the *Third Year (Professional Studies).* Once transfer students have begun *Professional Studies*, they must follow the curriculum (including all internships) as described in the catalog and complete the MPTdegree program in three years. Transfer students normally enroll for all PT Department courses listed in the PT curriculum.

Students continue in the PT major as long as the following criteria are maintained (students do not need to re-apply to advance to *Professional Studies*):

- Successfully complete all general education courses (as specified in the PT curriculum) as per university regulations specified in the catalog.
- Achieve a letter grade of "C" or better in all cognate science and PT Department courses (as specified in the PT curriculum).
- Achieve the following minimum cumulative grade point averages: First Year 2.50, Second Year 2.75, Third Year 2.85, Fourth and Fifth Years 3.0.
- Provide documentation of 70 hours of physical therapy patient contact experience before the first day of the fall term Third Year (this is in addition to the 10 hours patient-related PT exposure that were required for admission to the program; students must use documentation form available from P.T. Department). All experiences must be supervised by a licensed physical therapist.
- Achieve a grade of "S" (satisfactory) for each clinical internship specified in the PT curriculum.

- Achieve a minimum grade of "C" on the Comprehensive Exam given Fall term of the Fifth Year.
- Demonstrate professional behavior that conforms to the APTA Code of Ethics and the physical therapy licensure requirements of the Commonwealth of Pennsylvania.
- Maintain current, valid CPR and first aid certification.
- Provide evidence of current (at least annual) physical exam (including personal medical and health coverage information, annual TB screening, Hepatitis B verification or declination and immunization record).

Students are required to complete several full-time clinical internships as specified by the PT curriculum. Internship sites are located throughout the United States, but predominantly in Pennsylvania and the surrounding states. Costs associated with travel, housing, meals, liability insurance, uniforms, etc. are the responsibility of the student.

Students who do not already possess a bachelor's degree will receive a Bachelor of Science in Health Sciences upon successful completion of all PT curriculum requirements at the end of the Fourth Year. This degree does not qualify students to sit for licensure examination or to practice physical therapy.

Math Options for Physical Therapy Majors *

1. Students with a B+ average in high school math (through trigonometry or pre-calculus) and a score of less than 590 on the SAT in math will be enrolled in Math 103.
2. Students with a B+ average in high school math (through pre-calculus) and a score of 590 or greater on the SAT in math will be enrolled in MATH 114.

* University's Mathematics Placement Procedures may overrule the above options.

3. AP credit may be awarded in MATH 114 on the basis of the CEEB exam; no AP credit is available for MATH 103 on the basis of the CEEB exam.

Challenge Examinations For Physical Therapist Assistants

Physical therapy majors who are physical therapist assistants (PTA) and have graduated from a PTA program accredited by the Commission on Accreditation in Physical Therapy Education may petition to be exempt from the following courses by challenge examination.

- PT340 Basic Techniques in Patient Management (2 credits lecture, 1 credit lab)
- PT376 Therapeutic Modalities I (1 credit lecture, 1 credit lab)
- PT378 Therapeutic Modalities II (1 credit lecture, 1 credit lab)

Challenge examinations will include, at a minimum, all final written and practical examinations covering all content areas normally given for each course. Students must achieve a score of at least 77.00% (C) in all content areas to pass the examinations and earn the exemption. Majors who are PTAs and who wish to challenge any of the courses listed above should submit their request in writing to the PT Department Chairperson. The request must be submitted by the end of the quarter for the semester preceding the semester during which the student would normally take the course.

MASTER OF PHYSICAL THERAPY (MPT)

	Dept. and No.	Descriptive Title of Course	Credits		
		FIRST YEAR (Pre-professional studies)	**FALL**	**INT**	**SPRING**
COGNATE	BIOL 110-111	Structure-Function Human Body	4		4
COGNATE	CHEM 112-113	General & Analytical Chem I-II	4½		4½
GE WRTG-SPCH	WRTG 107-COMM 100	Composition-Public Speaking	3		3
GE C/IL	C/IL 102	Computing and Information Literacy	3		
GE QUAN	MATH 103 or 114	Pre-Calculus or Calculus		4[3]	
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	3		3
GE HUMN	HUMN ELECT	Humanities Electives		3[3]	3
GE FSEM	INTD 100[1]	Freshman Seminar	1		
			18½	**7**	**17½**
		SECOND YEAR			
MAJOR	PT 245	Principles of Human Anatomy			3
MAJOR	PT 290[1]	Clinical Educ. Seminar I			2
COGNATE	BIOL 245	General Physiology	4½		
COGNATE	PHYS 120-121	General Physics	4		4
COGNATE	PSYC 110-221	Fund. Psych.-Childhood/Adol.	3		3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	6		
GE PHIL-T/RS	PHIL-T/RS ELECT	Philosophy or T/RS Elective		3[3]	
GE HUMN	HUMN ELECT	Humanities Electives			6
			17½	**3**	**18**
		THIRD YEAR (Professional studies)			
MAJOR	PT 340	Basic Tech. in PT Mgmt.	3		
MAJOR	PT 342	Mgmt. of the Elderly			3
MAJOR	PT 345	Adv. Human Anatomy for PT	4		
MAJOR	PT 350	Intro. to Therapeutic Exercise	3		
COGNATE	BIOL 348	Neurophysiology			3
MAJOR	PT 347L	Applied Neuroscience Lab for PT			1
MAJOR	PT 351	Orthopaedic PT			4
MAJOR	PT 360	Clinical Sciences I			4
MAJOR	PT 375	Kines./Pathokines for PT	3		
MAJOR	PT 376/378	Therapeutic Modalities I, II	2		2
MAJOR	PT 390[1]	Clinical Educ. Seminar II			1
			15		**18**
		FOURTH YEAR (Summer)			
MAJOR	PT 480	PT Internship I (2 Cr.)			
		FOURTH YEAR			
MAJOR	PT 440	Org. and Mgmt. in PT			3
MAJOR	PT 452/453[2]	Advanced Clinical Skills	0-2		0-2
MAJOR	PT 455	Pediatric Development			3
MAJOR	PT 456	PT App. to Neuro. Popul.			4
MAJOR	PT 460	Clinical Sciences II	3		
MAJOR	PT 465	Psyc./Soc. Aspects of Disabilities (D)	3		
MAJOR	PT 470	Cardiopul. PT	4		
MAJOR	PT 477	Teaching in PT (W)	2		
MAJOR	PT 482	Prof. Development (opt.)			(2)
MAJOR	PT 490[1]	Cl. Edu. Seminar III			1
MAJOR	PT 493	Intro. to Research			3
GE QUAN	PSYC 210	Statistics in the Behavioral Sciences	3		
			15-17		**14-16 (18)**
		FIFTH YEAR (Summer)			
MAJOR	PT 580	PT Internship (3 Cr.)			
		FIFTH YEAR			
MAJOR	PT 552[2]	Advanced Clinical Skills	0-2		
MAJOR	PT 555	Correlative Rehabilitation	4		
MAJOR	PT 556	Motor Control/Motor Learning	3		
MAJOR	PT 581	PT Internship III			12
MAJOR	PT 582	Prof. Development (opt.)	(2)		
MAJOR	PT 584	Special Topics in Health Care	2		
MAJOR	PT 590	Clinical Educ. Seminar IV	1		
MAJOR	PT 593	Res. Design & Implementation	2		
			12-14 (16)		**12**
			Total: 174½ CREDITS		

[1] Twenty hours of service-learning integrated in these courses
[2] A minimum of two one-credit advanced clinical skills required (maximum of three recommended) to complete degree requirements
[3] If special circumstances (eg, AP credits) lighten fall or spring loads, intersession courses may be taken during fall or spring terms

PT 245 Drs. Mattingly, Kosmahl
Principles of Human Anatomy 3 credits
(PT majors only) An introduction to human gross anatomy emphasizing a systemic approach to the histological and morphological concepts of the skeletal, muscular, circulatory, and nervous systems. An introduction to normal human movement with emphasis on joint arthrokinematics and the mechanics of muscle action is also presented. Two hours lecture, two hours lab/week.

PT 290 Dr. Hakim
Clinical Education Seminar I 2 credits
(PT majors only) The first of four clinical education seminars will include an overview of the history, current practice and future profession of physical therapy. Current practice sites and settings are presented and observed with consideration of traditional and emerging roles and responsibilities of the physical therapist. In order to gain a better understanding of other health care members, students will conduct interviews with a variety of health care professionals and present the information to the class. Comprehensive exam of medical terminology will be included in this course. **This course includes a service-learning component.** Two hours lecture/week.

PT majors with junior status in PT program:

PT 340 Profs. Collins, Wagner
Basic Techniques in Patient Management 3 credits
This course is designed to instruct the learner in basic patient-management techniques which include: draping, positioning, bandaging, early mobility, body mechanics, transfers, gait-assistive device training, patient interviews, equipment management, sterile technique, wound care, universal precautions and OSHA regulations. Emphasis is placed on clinical observation and selection of appropriate interventions for safe and effective patient management. Laboratory exposure for demonstration and practice of all techniques is provided. Also included is the management of emergencies and critical incidents. Two hours lecture, two hours lab/week.

PT 342 Prof. Collins
Management of the Elderly 3 credits
A study of the responsibilities of the physical therapist with the well elderly. Emphasis on prevention of illness, injury, or disease through effective and timely intervention will be covered. A systematic approach to normal aging is also presented. Three hours lecture/week.

PT 344 Dr. Mattingly
Clinical Anatomy Review 2 credits
A review of human anatomy for physician assistant students with emphasis on clinical anatomy. A regional approach emphasizing skeletal, muscular, circulatory, and nervous structures comprising the head, neck, truck, and extremities. In addition, the contents of the thoracic and abdominal cavities will also be examined. Human prosections are included. *Registration limited to visiting physician assistant students.* Meeting dates and times by arrangement with instructor.

PT 345 Dr. Mattingly
Advanced Human Anatomy for Physical Therapy 4 credits
An in-depth study of gross human anatomy emphasizing a regional approach to the structural and functional relationships of skeletal, muscular, circulatory, and nervous structures comprising the head, neck, trunk, and extremities. Organic systems relevant to physical-therapy practice are also examined. Human dissections are included. Two hours lecture, four hours lab/week.

PT 347 Dr. Mattingly
Applied Neuroscience Laboratory for PT 1 credit
Application of neuroscience principles to understanding of clinical manifestations of neurological dysfunctions and evaluative techniques. Course will include an anatomical study of clinically relevant parts of the central and peripheral nervous systems. Two hours lab/week

PT 350 Prof. Leininger
Introduction to 3 credits
Therapeutic Exercise
This course introduces the concepts of fitness and exercise and prepares the student to design and implement basic therapeutic exercise regimens for clinical use. Normal responses to exercise and training, and patient responses to traditional therapeutic exercise regimens are presented. The course investigates physical fitness as a function of the following determinants: strength, endurance, flexibility, power and skill. Physiology of the neuromuscular system as it relates to exercise is reviewed. Energy metabolism and nutritional support for energy metabolism are discussed. The effects of aging, disuse, immobilization, denervation, and selected drugs on exercise performance are discussed. Laboratory activities include exposure to techniques for the clinical assessment and improvement of strength, flexibility, endurance, power, and skill (including manual muscle testing and goniometry).

PT 351 Prof. Leininger, Staff
Orthopaedic Physical Therapy 4 credits
This course prepares the student to practice entry-level orthopaedic physical therapy. Evaluation and treatment of musculoskeletal system dysfunction utilizing exercise, manual therapy (mobilization), and manual and mechanical traction are emphasized. Students learn to identify clearly specific musculoskeletal problems, and to plan and implement appropriate physical-therapy interventions. Students learn to recognize major signs and symptoms of systemic disease that can mimic primary musculoskeletal lesions. Evaluation tools are presented to help students recognize problems that are beyond physical-therapy expertise. Students learn how to make treatment-versus-referral decisions for patients who present presumed musculoskeletal problems. Two hours lecture, four hours lab/week.

PT 360 Drs. Sanko, Mattingly, Staff
Clinical Sciences I 4 credits
This course presents an overview of selected diseases and disorders for which patients are commonly referred for physical-therapy evaluation and treatment. The basic principles of pathology are integrated with current concepts of patient management. Relevant medical and surgical interventions will be reviewed with emphasis on the team approach of patient care and rehabilitation. Four lecture hours/week.

PT 375 Dr. Kosmahl
Kinesiology and 3 credits
Pathokinesiology for Physical Therapy
This course presents a study of normal movement, and movement dysfunction associated with selected forms of pathology. Emphasis is placed on the mechanics of muscle actions and joint arthrokinematics, and biomechanical factors are discussed. Normal and pathological gaits are studied. Two hours lecture, two hours lab/week.

PT 376 Profs. Leininger, Collins
Therapeutic Modalities I 2 credits
This course prepares the student for the safe, effective and appropriate application of therapeutic heat, cold, light, water, intermittent compression, and massage. The scientific basis for the use of these modalities is reviewed and correlated to issues of clinical evaluation, decision-making, and application. Laboratory exposure to these modalities is provided. One hour lecture, two hours lab per week.

PT 378 Dr. Kosmahl, Staff
Therapeutic Modalities II 2 credits
This course prepares the student for the safe, effective and appropriate use of electrotherapeutic modalities. The course builds upon the knowledge and skills learned in Therapeutic Modalities I. The pertinent physics and physiology are reviewed. Clinical evaluation, decision-making, and application are presented. The course reviews the physiology of pain and how pain can be modulated by use of electrotherapeutic modalities. Principles of electrophysiologic testing and the role of electrotherapeutic testing in neuromuscular diagnosis are presented. Laboratory exposure to all electrophysiologic testing equipment and procedures is given. One hour lecture, two hours lab per week.

PT 390 Prof. Wagner
Clinical Education Seminar II 1 credit
This second seminar will prepare students for their first full-time internship. A thorough orientation to the clinical education component of the curriculum will be provided, focusing on expectations, objectives, goals and responsibilities. In addition, an emphasis will be placed on gaining familiarity with the medical record, conducting patient interviews, developing active listening skills and acquiring beginner-level competency in professional documentation. Site selections for Internships # I and II will be made via a lottery system. **This course includes a service-learning component.** One hour lecture/week.

PT majors with senior status in PT program:

PT 440 Prof. Collins
(W)Organization and Management in Physical Therapy 3 credits
Introduction to the management process with specific information devoted to inter- and intra-departmental relationships, leadership style and theories, motivation, and decision making. Topics related to administrative policies/procedures in the provision of patient services are discussed. Student group presentations on specific management topics are required. Three hours lecture/week.

PT 452/453/552 Staff
Advanced Clinical Skills 1 Credit
These courses provide the opportunity for advanced study in a variety of clinical areas. Students are free to choose from among the course offerings to satisfy each student's interests. PT majors may take these courses during the senior and graduate years. PT majors are required to take a minimum of two advanced clinical skills courses. A maximum of three courses is recommended (one per semester). Available course offerings are posted in the PT Department before registration each semester. Instructors for these courses may be full or part-time faculty, or clinician specialists. Each course instructor determines course format and meeting times.

PT 455 Profs. Grant-Beuttler, Markwith
Introduction to Developmental Pediatrics 3 credits
This course involves a comprehensive look at the normal and abnormal development of motor and cognitive-issues from the prenatal period through early childhood. Theories of development and their influence on treatment concepts will be discussed. Use of developmental assessments tools will be introduced and the student will demonstrate basic proficiency in choosing pediatric assessments. Physical-therapy management of common pediatric conditions will be discussed. Lab experiences include: live observations and demonstrations, videos, hands-on experience with select assessment tools, and applicable clinical research. Two hours lecture, two hours lab/week.

PT 456 Dr. Hakim, Prof. Grant-Beuttler
PT Approaches to Neurological Populations 4 credits
A study of classic and contemporary approaches in the assessment and treatment of neurological populations. Concepts of normal/abnormal movement, cognition and perception, proprioceptive neuromuscular facilitation, neurodevelopmental treatment, and motor control/motor learning issues are discussed. There will be an in-depth analysis of examination, documentation and interventions. Lab experiences will concentrate on treatment planning and application, with problem-solving scenarios. Live demonstrations, videos and applicable clinical research will be incorporated into the learning process. Two hours lecture, four hours lab/week.

PT 460 Prof. Grant-Beuttler
Clinical Sciences II 3 credits
This course provides information on the diagnosis, etiology, medical evaluation and treatment of diseases and disorders associated with the central and peripheral nervous systems. Students are introduced to the physician's history and neurological exam, as well as basic neuropharmacologic principles. Diagnoses covered in the course include cerebral vascular accidents, basal ganglia disorders, cerebellar disorders, traumatic brain injury, spinal cord injury, neuro-

muscular disorders, peripheral nerve disorders, epilipsy, headache, coma and neurological problems in the elderly. Specific application for physical therapy evaluation, diagnosis, and treatment are briefly discussed. Three hours lecture/week.

PT 465 (D) Prof. Wagner
Psychosocial Aspects of Physical Disabilities 3 credits
A comprehensive look at the psychosocial components of physical disabilities. Particular emphasis will be placed on understanding the psychological, behavioral, emotional and cognitive influences affecting rehabilitation outcomes. Selected physical conditions will be examined. Concepts regarding life-stage development: stages of adjustment, strategies for intervention, sexuality, family adjustment and terminal illness will be explored. The impact of societal beliefs and values about the disabled will be discussed. The impact of cultural and societal beliefs and values about health, wellness and illness will be discussed. Case presentations will supplement didactic material. Three hours lecture/week.

PT 470 Dr. Sanko
Cardiopulmonary Physical Therapy 4 credits
An overview of the human physiological response to physical activity. Emphasis is placed on the acute and chronic adaptation of the body systems to activity by individuals in various states of health and disease throughout the lifespan. Principles of cardiopulmonary disease prevention, treatment, and rehabilitation are examined. Laboratory experiences are designed to illustrate these principles and develop skills necessary for their implementation. Three hours lecture, two hours lab/week.

PT 477 Prof. Collins
(W)Teaching in Physical Therapy 2 credits
Discussion of teaching, learning theories and the roles of the PT as a teacher is offered. Development and implementation of learning experiences (emphasis is on the student as a facilitator of patient learning) and the process of presenting information are included. Two hours lecture/week.

PT 480 Prof. Wagner, Dr. Hakim
Internship I 2 credits
A five-week, full-time introduction to the practice of physical therapy. The application of basic physical-therapy procedures, modalities and patient-management skills will be emphasized in a supervised general-hospital, outpatient, orthopaedic, sports-medicine or industrial-medicine setting. An in-service or case presentation, in addition to a reflective case study will be required during the internship.

PT 482 / 582 Staff
Professional Development 2 credits
PT majors in the fourth or fifth years may explore an area of special interest via this mentored independent study course. A faculty advisor is assigned to mentor the student's work. The mentor may be a full or part-time faculty, or a professional recruited from outside the University community. Approval of the PT Department chairperson is required. See the PT Department chairperson to arrange for this course. Optional.

PT 490 Prof. Wagner
Clinical Education Seminar III 1 credit
These weekly discussions will further prepare students for their subsequent internships and ongoing professional practice. Goals, objectives, expectations and responsibilities of Internship II will he clarified. Topics will include an analysis of individual learning and personality styles, assertiveness training, and increased awareness of the cognitive influences on behavior. Case presentations will be used to promote the development of clinical problem-solving skills. **This course includes a service-learning component.** One hour lecture/week.

PT 493 Dr. Sanko
Introduction to Research 3 credits
Introduction to research including design selection, general concepts of data collection and analysis, and the critical review of literature relevant to the field of physical therapy. Students are required to formulate a research hypothesis and submit a formal research proposal. Methods of research presentation are discussed. Three hours lecture/week.

PT majors with graduate status in PT program:

PT 555 Dr. Hakim
Correlative Rehabilitation 4 credits
This course is designed to integrate background knowledge and clinical practice in the areas of: ICU management, wound management, orthotics, prosthetics, oncology, head injury, speech/language, and spinal-cord injury.Exmination, inervention, and documentation issues are addressed as they pertain to each area. Concepts of impairment, disability, and handicap are discussed in relation to clinical management and an interdisciplinary approach. Laboratory experiences focus on treatment planning and application with problem-solving scenarios. Demonstrations, videos, equipment management, and clinical guest lecturers are included. Field trips to local rehabilitation facilities supplement the head-injury and spinal-cord injury modules. Three hours lecture, two hours lab/week.

PT 556 Dr. Hakim, Prof. Grant-Beuttler
Motor Control/Motor Learning 3 credits
This course introduces the science of motor control/motor learning including neuromotor processes that underlie normal and abnormal movement. Theories of motor learning and mechanisms of acquisition of movement are discussed. Motor control issues fousing on information processing, attention, motivation perception, balance and upper extremity use are examined. Current motor control/motor learning research is reviewed and clinical implications are discussed. Two hours lecture, two hours lab/week.

PT 580 Prof. Wagner, Dr. Hakim
Internship II 3 credits
A six-week, full-time intermediate level of physical-therapy practice. The application of more highly developed therapeutic skills and techniques will be emphasized in a supervised general-hospital, out-patient, orthopaedic, sports-medicine, pediatric, industrial-medicine, home-care, or private-practice setting. An in-service or case presentation, in addition to a reflective case study, will be required during the internship.

PT 581 Prof. Wagner
Internship III 12 credits
Two eight-week, full-time, advanced-level internships. Increased independence and decision-making skills will be stressed in supervised general-hospital, out-patient, orthopaedic, sports-medicine, industrial-medicine, rehabilitation, private-practice or in a student's "specialized" settings. Emphasis will focus on the integration of all didactic coursework directed at the goal of achieving "entry-level" clinical competence. An administrative project, case presentation or individual project, in addition to a reflective case study, will be required during each internship.

PT 584 Dr. Sanko
Special Topics in Health Care 2 credits
A discussion-centered course; the content will include the more contemporary issues in health-care delivery. Emphasis on the provision of physical-therapy services will be covered. Two hours lecture/week.

PT 590 Prof. Wagner
Clinical-Education Seminar IV 1 credit
The last in the series of clinical seminars, these weekly meetings will focus on establishing goals, objectives, expectations and responsibilities of the final two, full-time "specialty" internships. Guidance for the selection of specialized sites will be available. Information and assistance will be provided to prepare students for state-licensing examinations. Students will design a personal portfolio and develop a resume. Job searching techniques, interviewing skills and employment options will be addressed. One hour lecture/week.

PT 593 Dr. Sanko
Research Design and Implementation 2 credits
Students refine and implement the research proposals submitted in PT 493. The collection of data with appropriate statistical analysis is completed and a formal written presentation in approved format of the methods, results, and conclusion is required. All research initiated is subject to the rules and policies of the University with regard to the human or animal subjects.

Dexter Hanley College

The Dexter Hanley College has been providing quality education for adult students for almost 80 years. Dexter Hanley College continues this tradition of student-centered administration that supports adults in achieving their academic goals.

Dexter Hanley College provides services for visiting students, students in grades six through twelve, as well as continuing full-time and part-time students. Additionally, Dexter Hanley College administers the University's evening, intersession and summer sessions.

MISSION STATEMENT

Dexter Hanley College, the undergraduate college for adult and non-traditional students, is committed to carrying on the Jesuit tradition by offering quality programs, quality services and the opportunity for students to reach their educational goals. Dexter Hanley College is dedicated to serving the local community and continually updates its programs and services in response to the community's ever-changing needs. The baccalaureate degrees earned by DHC students and the faculty who teach for DHC are the same as for the other University of Scranton undergraduate colleges. In addition, DHC offers credit certificate programs and associate degrees that apply towards the baccalaureate degrees.

Dexter Hanley College serves primarily the following seven groups:

1. Adults who wish to pursue an undergraduate degree
2. Students who wish to pursue an undergraduate degree on a part-time basis or attend evenings only
3. Students who want to obtain an associate degree or certificate
4. Adults who want to improve their professional competence and/or to prepare themselves for new careers
5. Adults who want to take advantage of educational programs for enrichment
6. Students in grades six through twelve who want to prepare for college, take college-level courses, or participate in enrichment programs
7. Visiting students from other colleges and universities

Dexter Hanley College is dedicated to helping students succeed by offering scholarship opportunities, life-experience credits, academic and career counseling, and academic support services.

DEGREE PROGRAMS

Dexter Hanley College students may attend courses offered in the day or at night. Students who can attend courses scheduled for mornings and afternoons may choose from degree programs in Group 1 or Group 2. Students who plan to attend only in the evening may select from Group 2.

Group 1: In general, courses that comprise the **major** for these degree programs are offered during the daytime only.

BACHELOR'S DEGREE

Accounting
Information Systems
Biochemistry
Biology
Biophysics
Chemistry
Chemistry/Business*
Chemistry/Computers*
Computer Engineering*
Computer Science*
Early Childhood Education*
Elementary Education*
Secondary Education*
Electrical Engineering*
Electronics/Business*
Exercise Science
English*
Environmental Science
Foreign Languages
Gerontology*
Human Services*
International Business*
International Language Business*
International Studies*
Mathematics
Medical Technology
Neuroscience
Nursing*
Physical Therapy
Physics
Pre-Engineering
Political Science*
Psychology
Special Education*
Theatre

ASSOCIATE DEGREE

Electrical Engineering*
Computer Engineering

*Some courses in this major are available evenings.

Group 2: **Major, cognate** and **general education** courses for these degrees are available either night or day.

BACHELOR'S DEGREE		ASSOCIATE DEGREE
Accounting	Liberal Studies	Associate in Arts
Communication	Management	Business
Computer Info. Systems	Marketing	Computer Information Systems
Criminal Justice	Media & Information Technology	Criminal Justice
Economics	Nursing for R.N.s	Gerontology
Finance	Operations Management	Health Administration
Health Administration	Philosophy	Human Services
History	Sociology	Political Science
Human Resources Studies	Theology/Religious Studies	Sociology

The Dexter Hanley College baccalaureate programs have the same general-education requirements as the corresponding programs in The College of Arts and Sciences, The Kania School of Management, and The Panuska College of Professional Studies. It should be noted, however, that the physical-education requirement is waived for Dexter Hanley College students.

Curricular requirements for each degree program will be found on pages indicated in the index at the back of this catalog. Math-placement testing may determine additional math prerequisites in addition to those specified by a degree program.

ADMISSION INFORMATION

APPLICATION FOR ADMISSION

Admission to The Dexter Hanley College at The University of Scranton is based on the applicant's academic record, life experiences and motivation to continue education. Application forms may be obtained from the Admissions Office, Dexter Hanley College (DHC) or may be requested by phone (570) 941-5813, Fax (570) 941-5819. Additional information is available on the web at http://www.scranton.edu/dhc.

The Admissions Office operates on a rolling admissions plan which processes applications on a continual basis as received. All candidates are informed of the admission decision within two weeks after the completion of their files of supporting credentials.

To complete the application file, the candidate must have the following sent to the Office of Admission, DHC.

1. A completed application form accompanied by the $20.00 application fee;

2. An official high school transcript (and Graduate Equivalency Diploma (GED), including scores, when applicable).

Official transcripts of high school and previous college courses (where applicable) must be submitted to the Admissions Office not later than three weeks before the beginning of classes each semester so that the student may be considered for official admission to the College. Applicants with a minimum of 15 earned credits from an accredited college or university do not need to submit high school transcripts or GED scores.

Appointments to meet with an admissions counselor prior to registration may be made by contacting the Office of Admissions at (570) 941-5813.

ADMISSION OF TRANSFER STUDENTS

Under the rolling admissions plan, transfer candidates may be considered on the basis of their last semester's courses and previous work at an accredited college or university. Students who have been dismissed from another institution cannot apply to the University of Scranton any sooner than one full semester after the semester in which the dismissal took place. All candidates are informed of the admission decision within two to three weeks after completion of their files of supporting credentials.

To complete the application file, a transfer candidate must have the following sent to the Office of Admissions, Dexter Hanley College:

1. A completed application form accompanied by the $20.00 application fee.
2. Official high school transcript/GED scores. (Applicants with a minimum of 15 earned credits from an accredited college or university do not need to submit high school transcripts or GED scores.)
3. Official transcripts, mailed directly from every college or university attended.

Official transcripts of high school and previous college courses (where applicable) must be submitted to the Admissions Office not later than three weeks before the beginning of classes each semester so that the student may be considered for official admission to the College.

In general, advanced standing will be granted for previously completed courses when they are equivalent or comparable to courses at the University, the student received grades of C or higher, and the courses meet requirements for the degree program. If the student changes major at a later date, another review of transfer credits will be made at that time, and the student will be given a written evaluation clearly indicating the transfer credits that apply to the new major. In all cases, for a bachelor's degree, transfer students must earn a minimum of 63 credits at the University of Scranton. Once a transfer student matriculates, the University policy on course transfers applies.

CONDITIONAL ADMISSION

A student may be admitted conditionally if official transcripts have not been received in the Admission Office before classes begin. The student whose official records have not been received within five weeks after classes have begun will not be allowed to register for a subsequent term.

Upon receipt and evaluation of the official academic transcripts, the Admissions Office will notify the student regarding acceptance or rejection. The student who is rejected will be allowed to finish the semester if he/she wishes to do so, but will not be allowed to register for subsequent terms. The student who is accepted will be subject to all rules, regulations and policies of regularly enrolled students. Because official academic transcripts are necessary for effective academic advising, the student who enters under the conditional admission policy takes full responsibility for any errors in course selection and for all extra costs involved in making changes in class registrations.

DEXTER HANLEY COLLEGE TRANSITION PROGRAM

Dexter Hanley College students who are internal or external probationary acceptances and those students who wish to change major or declare a major but do not have the required grade-point average for acceptance into the new major will be placed into the college transition program. Students will remain in this program until they have achieved the necessary grade points for entrance into the desired major or thirty credits from time of acceptance into the program. This program will include intensive academic advising; campus-wide referrals for students with special needs; and the opportunity to matriculate in a specific major or use the Liberal-Studies major in preparation for a more generalized approach to career success.

READMISSION

Once accepted into Dexter Hanley College, a student must maintain continuous enrollment. The dean may approve requests for one, and, on occasion, two consecutive semester leaves of absence. Students who do not attend the University for a semester or more, without an approved leave of absence, may be required to complete a full application for readmission. This may also result in a student's needing to fulfill new curricular requirements. To apply for re-admission, contact Dexter Hanley College directly at (570) 941-7580, not the Admissions Office.

SECOND BACCALAUREATE DEGREE

University of Scranton graduates and persons with good scholastic records and a baccalaureate degree from a regionally accredited institution, who wish to earn a second baccalaureate degree at The University of Scranton, must apply to Dexter Hanley College.

Candidates for a second baccalaureate degree are expected to complete a minimum of 30 credits at The University of Scranton beyond the completion of the studies for the first degree, of which at least 15 credits must be in the second degree's major. Students must complete all requirements for the second degree not covered by the first degree program for the major and cognate. All prerequisites for major and cognate courses must also be completed.

No semester hours from the first baccalaureate degree can be used toward this 30 credit requirement. Grades for courses taken by University of Scranton graduates after completion of the requirements for the first baccalaureate degree will have no effect on the final grade-point average of the first degree.

Graduates of a University of Scranton baccalaureate program who wish to obtain a second University of Scranton baccalaureate degree are eligible for a 50% tuition discount.

CERTIFICATE PROGRAMS

Students wishing to complete a certificate program in Dexter Hanley College must meet the requirements specified by the appropriate department.

SELF-IMPROVEMENT

Students who do not plan to work toward a degree or a certificate must also file the application for admission and must arrange for official transcripts to be sent to the Dexter Hanley College Admissions Office.

VISITING STUDENTS

Students matriculated in other colleges or universities who wish to take courses for credit at The University of Scranton should present the written approval of their dean or other authorized administrator for all courses taken at The University of Scranton. The University of Scranton does not guarantee transferability of its courses. **Reader courses are not available for visiting students.**

Visiting students must complete an application form but are not required to submit transcripts. Visiting students taking more than one course in any semester are required to attend orientation.

READMISSION OF DISMISSED STUDENTS

If a Dexter Hanley College student who has been dismissed from the University of Scranton wishes to apply for readmission to the University, the student may do so no sooner than one full semester after the semester in which the dismissal took place. Readmission is not automatic; the student will need to demonstrate that the conditions which led to dismissal will not present a continuing problem. If a student is dismissed a second time from the University, readmission is not permitted. Students who want to be readmitted need to apply to Dexter Hanley College directly, not to the Admissions Office.

AUDITORS

Dexter Hanley College students may register as auditors with the approval of the dean. Entry of the audit grade on the transcript assumes satisfactory attendance at class meetings. The student should consult with the instructor as to what constitutes satisfactory attendance. Auditors are not responsible for assigned work, quizzes, or examinations, and they receive no credit for the course. Students not enrolled as auditors who wish to change their status to that of auditor must do so by deadlines specified in the academic calendar on the inside front cover of this catalog. Auditing students pay the regular tuition and fees.

DEXTER HANLEY COLLEGE ADVISING CENTER

In Dexter Hanley College, academic advising begins with admission interviews, registration and new-student orientations. Ongoing advising services that support students through their years of study to graduation provide all students, including transfer and evening students, with stability and continuity in their academic planning. DHC students are assigned faculty advisors by their choice of major. They are also assisted by staff advisors who are available twelve months a year during day and evening DHC office hours.

The staff in Dexter Hanley College, Career Services and the Counseling Center are also available for consultation regarding academic, career and personal issues.

UNIVERSITY OF SCRANTON/MARYWOOD UNIVERSITY CROSS REGISTRATION

After completing 30 credits at the University of Scranton, Dexter Hanley College full-time students in good academic standing may take two courses (equivalent to six credits) at Marywood during the calendar year (January-December). Part-time students can take one Marywood course for every five University of Scranton courses for a maximum of six Marywood courses. Interested students should contacat the DHC Advising Center.

B.S. IN NURSING FOR R.N. STUDENTS

DR. DONA RINALDI CARPENTER, Director, R.N. Track

The registered-nurse student is recognized as an adult learner who comes with a diversity of life experiences, education, and clinical expertise, as well as motivation and ability to learn independently and collaboratively. To facilitate advanced placement, opportunity is provided for students to validate previously acquired educational and clinical competencies.

The nursing program, accredited by the National League for Nursing Accrediting Commission, is open to all registered nurses who meet admission requirements. The registered-nurse student may enroll on either a full-time or part-time basis.

To apply for admission to the B.S. for R.N. track, students should submit the following with completed application forms and fees:

1. Official transcripts from high school, nursing school and other colleges attended.
2. A copy of current Pennsylvania Registered Nurse License.

Transcripts are individually reviewed and evaluated. Transfer courses, especially courses in the sciences, must be equivalent to courses in the nursing program at The University of Scranton (science courses taken at a non-degree program are accepted if they were taken at an affiliated college and received college credit); a grade of C or better must have been earned.

Student Policies: R.N. Track

1. In order to continue in the nursing program, ordinarily the R.N. student must enroll in a minimum of one course in each regular semester.
2. The R.N. student is expected to complete the degree requirements within seven years from the date of admission. 57 credits in Nursing are required for the degree, 38.5 of which may be earned by verifying current employment or graduation through an original R.N. program less than 10 years prior to acceptance. The 38.5 validation credits are posted on the student's official transcript.
3. Students must have completed at least 100 credits prior to enrollment in NURS 493. Completion of all course work toward the baccalaureate degree is suggested prior to enrollment in NURS 473.
4. Nursing students must achieve a grade of C or better in the major and cognate courses. Once the student is enrolled, all Nursing courses must be taken at The University of Scranton.
5. Before students begin clinical work, they must submit copies of their professional malpractice-liability insurance policy, evidence of current licensure and CPR certification.
6. Students who have earned an overall GPA of 3.3 or higher may choose an accelerated track toward the M.S. in Nursing. NURS 510, 591, 593 and 595 may be taken in lieu of NURS 473, 483 and 493. Additional information is available from Dr. Carpenter, Director of the R.N. Track.
7. Dexter Hanley College students will meet the service-learning requirements by completing major courses that have a service-learning component.

SUGGESTED GUIDE TO PROGRAM PLANNING FOR REGISTERED NURSE STUDENTS

	Dept. and No.	Descriptive Title of Course	Credits
		FIRST YEAR	
GE NSCI	CHEM. 110-111	Introduction to Chemistry I-II	6
GE NSCI	BIOL. 110-111	Structure and Function I-II	8
GE SPCH-WRTG	COMM 100-ENGLT 107	Public Speaking-Composition	6
GE C/IL	C/IL 102[1]	Computer and Information Literacy	3
GE PHIL-T/RS	PHIL 120[1]	Introduction to Philosophy	3
GE S/BH	PSYC 110[1]	Fundamentals of Psychology	3
			29
		SECOND YEAR	
MAJOR	NURS 241	Perspectives in Professional Nursing	3
MAJOR	NURS 242	Nursing Related to Assessment of Health Patterns	3
COGNATE	BIO 210	Intro. to Medical Microbiology	3
COGNATE	NUTR	Nutrition	2
GE QUAN	PSYC 210 or EDUC 120	Psychological Statistics/Applied Statistics	3
GE PHIL-T/RS	T/RS 121	Theology I	3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	6
GE HUMN	ELECTIVES	Humanities Electives	9
GE S/BH	PSYC 225	Abnormal Psychology	3
			35
		THIRD YEAR	
MAJOR	NURS	Nursing Validation Credits	38½
GE PHIL-T/RS	ELECT[1]	T/RS Elective	3
GE ELECT	PSYCH[2]-ELECT	Childhood & Adolescence-Free Elective	6
			47½
		FOURTH YEAR	
MAJOR	NURS 471[3,4]	Community Health Nursing	3½
MAJOR	NURS 473[4]	Synthesis of Leadership Concepts In Nursing	3
MAJOR	NURS ELECT	Nursing Elective	3
MAJOR	NURS 493	Research in Nursing	3
GE HUMN	HUMN ELECT	Humanities Elective	3
GE ELECT	PHIL 212[2]-ELECT	Medical Ethics and/or Free Electives	6
			21½

Total: 133 CREDITS

[1] Fall or spring
[2] Department recommendation
[3] Portfolio option available
[4] Clinical Practicum Fee

B.S. IN NURSING FOR LPN STUDENTS

DR. SHARON HUDACEK, Director, LPN to BSN Track

ADMISSIONS REQUIREMENTS

1. Graduation from an LPN program accredited by National League for Nursing (NLN) Accrediting Commission.
2. A current LPN license valid in Pennsylvania.
3. A passing score on advanced placement credit exams.

ADMISSIONS PROCEDURES

1. Submit a " University of Scranton Application for Admission" to Dexter Hanley College. Information is available by calling (570) 941-5813.
2. Schedule an interview with either a Dexter Hanley College representative or a member of the Nursing Department.
3. Submit two letters of recommendation from an employer within the last five years. If you are a recent LPN graduate, these references could be a faculty member from your institution.
4. Submit a copy of a current LPN license to Dexter Hanley College.
5. Have official transcripts of your LPN program, high school and all previous college credits sent to the Dexter Hanley Admissions Office, The University of Scranton, Scranton, PA 18510.
6. Register for ACE I through Dexter Hanley College.

NOTE: Once accepted, LPNs are subject to all policies for nursing students as indicated in the University's Nursing Student Handbook.

ADVANCED PLACEMENT CREDIT EXAMS

Students are accepted into the LPN to BSN program after they successfully complete the ACE I exams, offered in January and July of each year. After acceptance, LPNs meet with a nursing advisor to plan their curriculum.

After the student successfully completes the ACE I Fundamentals, Obstetrics/Pediatrics exams and the "Clinical Skills Challenge," the following courses will be waived:

Fund. Mobility Exam	Fundamentals of Nursing	4 cr.
OB/Peds	Nursing Care of the Childbearing Family (NURS 373)	3 cr.
	Nursing Care of Children and Adolescents (NURS 452)	3 cr.
	Clinical Skills Challenge (Campus Lab Testing)	8 cr.
		Total: 18 cr.

If the student successfully completes the optional ACE II RN exams (Medical/Surgical and Obstetrics/Pediatrics), the following courses will be waived:

Med. Surg. Nursing (Theory)	Nursing Care of the Adult I, II, & III (NURS 350, 371 & 450)	9 cr.
OB/Peds Nursing (Theory)	Nursing Care of the Childbearing Family (NURS 373)	1½ cr.
	Nursing Care of Children and Adolescents (NURS 452)	1½ cr.
		Total: 12 cr.

A maximum, therefore, of 30 Mobility credits are available to LPNs.

Note: If a passing score on the ACE exams is not achieved, the student is required to enroll in the corresponding course(s). Students may repeat each exam one time.

SUGGESTED GUIDE TO PROGRAM PLANNING FOR LPN TO B.S.N. CURRICULUM

Dept. and No.	Descriptive Title of Course	Credits
	PRE-NURSING REQUIREMENTS	
WRTG 107	Composition	3
C/IL 102	Computer Literacy	3
BIO 110/110L	Structure & Function of the Human Body	4
BIO 111/111L	Structure & Function of the Human Body	4
		14

Exams: ACE I Obstetrics/Pediatrics (6 cr.)
ACE I Fundamentals Exam (4 cr.)

	FIRST FALL	
PSYC 110	Fundamentals of Psychology	3
NURS 241	Perspectives in Professional Nursing	3
NURS 350	Nursing Care of the Adult I[1]	(3)
NURS 352/352L	Mental Health Nursing (w/Lab)	5½
NURS 360	Pharmacology II	1
COMM 100	Public Speaking	3
		15½ - 18½

	FIRST INTERSESSION	
HUMN ELECT	Humanities Elective[2]	3
ELECT	Free Elective	3
		6

Exams: ACE II Exams Available – Obstetrics/Pediatrics, Medical/Surgical (12 cr.)

	FIRST SPRING	
HUMN ELECT	Humanities Elective[2]	3
NURS 242/242L	Nursing Related to the Assessment of Health Patterns (w/Lab)	3
NURS 262	Pharmacology I	1
NURS 361	Pharmacology III	1
NURS 371	Nursing Care of the Adult II[1]	(3)
NURS 373	Nursing Care of the Childbearing Family[1]	(1½)
PHIL 120	Intro to Philosophy	3
		11 - 15½

	SECOND SUMMER I	
BIOL 210	Introductory Medical Microbiology	3
HUMN ELECT	Humanities Elective[2]	3
		6

	SECOND SUMMER II	
GE ELECT	Free Elective	3
GE ELECT	Free Elective[3]	3
	Pre-Chem Tools Seminar	0
		6

	SECOND FALL	
CHEM 110	Introductory Chemistry I	3
NURS 450	Nursing Care of the Adult III[1]	(3)
EDUC 120	Applied Statistics	3
NURS 452	Nursing Care of Children & Adolescents[1]	1½
T/RS 121	Theology I	3
EXSC 220	Nutrition for Health Profession	3
		13½ - 16½

SECOND INTERSESSION

HUMN ELECT	Humanities Elective[2]	3
T/RS 122	Theology II	3
		6

SECOND SPRING

NURS 493	Research in Nursing	3
PHIL 210	Ethics	3
CHEM 111	Introductory Chemistry II	3
NURS 471/471L	Community Health Nursing (w/Lab)	3½
NURS 473/473L	Synthesis of Leadership Concepts In Nursing (w/Lab)	3
NURS 475/475L	Critical Care Nursing (w/Lab)	3
		18½

Other: NCLEX Review Course

THIRD SUMMER I

T/RS-PHIL ELECT	Philosophy or T/RS Elective	3
PSYC 225	Abnormal Psychology[4] or Elective	3
		6

Note: Pre-Chemistry course available.

THIRD SUMMER II

GE ELECT	Free Elective	3
		3

Total: 133 CREDITS

[1]Course will be waived if student passes the ACE II exam
[2]Students must take 6 credits (two courses) from those designated as CH (History), CL (Literature), CF (Foreign Languages).
[3]The department recommends PSYC 221, Childhood and Adolescence.
[4]Recommended but not required.
( ) Validation testing is available for these courses.

LIBERAL STUDIES

The Liberal Studies major is a highly individualized program offered exclusively through Dexter Hanley College. Students may select either the Arts Track or the Professional Track when pursuing this major. Applicants who have attended other accredited colleges may transfer up to 60 credits for applicable courses in which a grade of "C" or better has been earned. Students who qualify for this interdisciplinary degree program are eligible to earn as many as 30 semester hours for academically relevant experience.

ARTS TRACK IN LIBERAL STUDIES

The Arts Track is designed for the student interested in the liberal arts including (but not limited to) humanities, social-behavioral sciences, philosophy, theology, and the natural sciences/mathematics. The student may also maximize transfer credit by including one concentration with non-technical credit earned at an accredited institution, enen if these credits were earned in a major not offered at The University of Scranton. The student may select three or four areas of concentration totaling 63 credits with no less than 15 credits and no more than 24 credits in each.

DEGREE REQUIREMENTS FOR B.S. IN LIBERAL STUDIES, ARTS TRACK

General Education	**Credits**
Natural Science	6
Quantitative Reasoning[1]	3
Social/Behavioral Sciences	6
Skills Acquisition	
WRTG 107	3
COMM 100	3
C/IL 102 and C/IL 102L	3
Humanities[2]	12
Philosophy/Theology-Religious Studies	
PHIL 120	3
PHIL 210	3
T/RS 121	3
T/RS 122	3
PHIL-T/RS ELECT	3
General Education Electives	12
General Education Total	**63 credits**
Concentrations	

Student may complete three or four Concentrations, having no fewer than 15 credits and no more than 24 credits per Concentration.

Concentration Total	**63 credits**
DEGREE TOTAL	**126 credits**

NOTES: All Liberal Studies students must take two courses designated as writing intensive (W) and two courses designated as cultural-diversity (D).

In compliance with terms set by AACSB accreditation, no more than 30 credits of the concentration may be School of Management courses.

The only Physical Education courses which may be counted towards the Liberal Studies degree are those that are three or more credits in duration.

No minors are granted with the Liberal Studies program.

No College of Arts and Sciences concentrations are granted within the Liberal Studies degree.

[1] If placement testing indicates a need for MATH 005, it will be placed in the free elective areas.

[2] Credits must be earned in at least two areas with six credits from one area (HIST, LIT or LANG) and a maximum of three credits from the ARTS/MUSIC/THEATRE area.

PROFESSIONAL TRACK IN LIBERAL STUDIES

The Professional Track allows students an interdisciplinary professional degree with flexibility of choice in concentration areas. This degree includes three concentrations with no fewer than 15 credits and no more than 24 credits. One concentration may be transferred in a non-technical major from an accredited college, even if these credits were earned in a major not offered at The University of Scranton. Faculty advisors from represented disciplines will be assigned to help students select appropriate courses to prepare for post-baccalaureate work or career selection.

DEGREE REQUIREMENTS FOR B.S. IN LIBERAL STUDIES, PROFESSIONAL TRACK

General Education	**Credits**
Natural Science	6
Quantitative Reasoning[1]	3
Social/Behavioral Sciences	6
Skills Acquisition	
WRTG 107	3
COMM 100	3
C/IL 102 and C/IL 102L	3
Humanities[2]	12
Philosophy/Theology-Religious Studies	
PHIL 120	3
PHIL 210	3
T/RS 121	3
T/RS 122	3
PHIL-T/RS ELECT	3
General Education Electives	12
General Education Total	**63 credits**

Concentrations

Student will complete three Professional Areas with a total of 63 credits. Each area must contain no less than 15 credits and no more than 24 credits per Professional Area.

Concentration Total	**63 credits**
DEGREE TOTAL	**126 credits**

NOTES: Students must complete COMM 315, WRTG 211, and any college-level statistics course. These courses may be used to satisfy requirements in one of the professional areas, the quantitative reasoning requirement, or as an elective.

All Liberal Studies students must take two courses designated as writing-intensive (W) and two courses designated as cultural-diversity (D).

In compliance with terms set by AACSB accreditation, no more than 30 credits of the concentration may be School of Management courses.

The only Physical Education courses which may be counted towards the Liberal Studies degree are those that are three or more credits in duration.

No minors are granted with the Liberal Studies program.

No College of Arts and Sciences concentrations are granted within the Liberal Studies degree.

[1] If placement testing indicates a need for MATH 005, it will be placed in the free elective areas.

[2] Credits must be earned in at least two areas with six credits from one area (HIST, LIT or LANG) and a maximum of three credits from the ARTS/MUSIC/THEATRE area.

ASSOCIATE DEGREES

ASSOCIATE IN ARTS

The Associate in Arts is often classified as the Liberal-Arts "transfer degree" in that it provides the student with a broad exposure to the arts and sciences.

Degree Requirements for Associate in Arts*

Each candidate for the degree must complete 60 semester hours of credit. Of these, 54 credits must be earned in the liberal arts, according to a prescribed plan covering the humanities, social/behavioral sciences, philosophy, theology/religious studies, and natural sciences/mathematics. The remaining six semester hours are allotted to free electives. Applicants who have attended other accredited colleges may transfer up to 30 credits for applicable courses in which a grade of "C" or better was earned. An outline of the degree credit requirements follows:

General Education

	Dept. and No.	Descriptive Title of Course	Credits
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	6
GE C/IL-QUAN	C/IL 102-	Computer and Information Literacy	3
	MATH ELECT	Math Elective	3
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	6
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics-Theology II	6
GE S/BH	S/BH ELECT	Social/Behavioral Electives	6
GE NSCI	NSCI ELECT	Natural Science Electives	6
Major/Cognates			
HUMN ELECT	ELECT	Humanities Electives	24

Total: 60 CREDITS

* Liberal Arts includes humanities, social/behavioral sciences, philosophy, theology, and natural sciences/mathematics

ASSOCIATE DEGREES IN CAREER-RELATED FIELDS

The Associate of Science degree in career-related fields has been designed as the natural companion to the Bachelor of Science degrees in those majors. Course requirements follow:

BUSINESS

General Education

	Dept. and No.	Descriptive Title of Course	Credits
GE QUAN/ELECT	MATH 107	Quantitative Methods I-II	6
GE ELECT	ELECT/MATH 106	Free Elective	3
GE S/BH	ECO 153-154	Principles of Micro-Macro Economics	6
GE WRTG	WRTG 107	Composition	3
GE SPCH	COMM 100	Public Speaking	3
GE C/IL	C/IL 104 (+ LAB)	Computer and Information Literacy	3
GE HUMN	HUMN ELECT[2]	Humanities Electives	9
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy	3
GE PHIL-T/RS	T/RS 121	Theology I	3
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics or Theology II	3
Major/Cognates			
	MGT 161	Introduction to Business	3
	ACC 253-254	Financial/Managerial Accounting	6
	STAT 251-252	Statistics for Business, I-II	6
	MGT 251	Legal Environment of Business	3

Total: 60 CREDITS

[1] Math placement testing may determine additional math prerequisites in addition to the math specified for this degree program.
[2] Must take two (2) courses in history, literature, or foreign language. The other three credits will be in one of the other two areas including Art and Music
NOTE: Students who complete the associate degree in business and wish to continue toward the B.S. in Accounting, Economics, Finance, Management, Marketing, or Operations Management, must have attained a 2.0 in major and cognate courses and an overall G.P.A. of 2.0.

COMPUTER ENGINEERING

General Education

	Dept. and No.	Descriptive Title of Course	Credits
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	6
GE C/IL	C/IL 102	Computer and Information Literacy	3
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	6
GE HUMN	HUMN ELECT	Humanities Electives	6
GE S/BH	S/BH ELECT	Social/Behavioral Elective	9
			30

Major /Cognates

PHYS 140-141	Elements of Physics I-II	8
PHYS 243L		2
PHYS 270	Elements of Modern Physics	4
MATH 103[1]-114	Pre-Calculus-Analysis I	8
MATH 142	Discrete Structures	4
MATH 221-222	Analysis II-III	8
CMPS134	Computer Science I	3
CMPS 144	Computer Science II	4
CMPS 240	Data Structures	3
CMPS 250	Machine Organization and Assembly Language Programming	3
ENGR 250	Statistics	3
E/CE 240	Introduction to Digital Circuits	3
E/CE 340	Digital Systems	3
EE 241	Circuit Analysis	4

Total: 90 CREDITS

[1]Math placement testing may determine additional math prerequisites in addition to the math specified for this degree program.

COMPUTER INFORMATION SYSTEMS

General Education

	Dept. and No.	Descriptive Title of Course	Credits
GE C/IL	C/IL 102	Computer and Information Literacy	3
GE QUAN	MATH 142[1]	Discrete Structures	4
GE S/BH	ECO 153	Principles of Micro Economics	3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	6
GE HUMN	HUMN ELECT	Humanities Electives	9
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	6
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics or Theology II	3
GE ELECT	FREE ELECT[2]	Free Elective	6
			40

Major /Cognates

CMPS 134, 144	Computer Science I, II	7
MATH 204 or STAT 251	Special Topics of Statistics or Statistics for Business I	3
CMPS 240	Data Structures	3
CMPS 250	Machine Organization & Assembly Language Programming	3
CMPS 330	Information Systems	3
CMPS 340	File Processing	4
		23

Total: 63 CREDITS

[1]Math placement testing may determine additional math prerequisites in addition to the math specified for this degree program.
[2]ECO 154 is recommended

CRIMINAL JUSTICE

General Education

	Dept. and No.	Descriptive Title of Course	Credits
GE NSCI	PHYS 107[1]	"Hands On" Physics	3
GE NSCI	ELECT	Natural Science Elective	3
GE S/BH	SOC 110	Introduction to Sociology	3
GE S/BH	PSYC 110	Fundamentals of Psychology	3
GE S/BH	PS 131[1]	American National Government II or	
	SOC 112[1]	Social Problems	3
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	6
GE C/IL	C/IL 102	Computer and Information Literacy	3
GE HUMN	HUMN ELECT[2]	Humanities Electives	9
GE PHIL -T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	6
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics or Theology II	3
GE ELECT	FREE ELECT	Free Elective	3
			45

Major/Cognates

CJ 110	Introduction to Criminal Justice	3
S/CJ 210	Law and Society	3
S/CJ 212	Criminological Research	3
S/CJ 213	Criminology	3
FREE ELECT	Free Electives	6
		Total: 63 CREDITS

[1] Recommended courses.
[2] This could also be used for **writing-intensive** and/or **cultural-diversity** credit.

ELECTRICAL ENGINEERING

General Education

	Dept. and No.	Descriptive Title of Course	Credits
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	6
GE C/IL	C/IL 102	Computer and Information Literacy	3
GE PHIL - T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	6
GE HUMN	HUMN ELECT	Humanities Elective	3
GE S/BH	S/BH ELECT	Social/Behavioral Elective	3
			21

Major/Cognates

PHYS 140-141	Elements of Physics I-II	8
PHYS 270	Elements of Modern Physics	4
MATH 103[1]-114	Pre-Calculus-Analysis I	8
MATH 221-222	Analysis II, III	8
CMPS 134	Computer Science I	3
ENGR 250-252	Statics-Solid State Materials	6
ENGR 253-254	Introduction to CAD-3D CAD	2
EE 240	Introduction to Digital Circuits	3
EE 241	Circuit Analysis	4
EE 343	Electronic Circuits I	3
EE 243L	Digital-System Design Lab	2
		51
		Total: 72 CREDITS

[1] Math placement testing may determine additional math prerequisites in addition to the math specified for this degree program.

GERONTOLOGY

General Education

	Dept. and No.	Descriptive Ttle of Course	Credits
GE NSCI	CHEM 100[1]	Elements of Chemistry	3
GE NSCI	NSCI ELECT	Natural Science Elective	3
GE S/BH	SOC 110	Introduction to Sociology	3
GE S/BH	PSYC 110	Fundamentals of Psychology	3
GE S/BH	PSYC 222[1]- SOC 112	Adulthood and Aging or Social Problems	3
GE SPCH-WRTG	COMM100-WRTG 107	Public Speaking-Composition	6
GE C/IL	C/IL 102	Computer and Information Literacy	3
GE HUMN	HUMN ELECT[2]	Humanities Electives	9
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	6
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics or Theology II	3
GE ELECT	FREE ELECT	Free Elective	3
			45

Major/Cognate

GERO 110	Introduction to Gerontology	3
GERO 230	Social Policy and Aging	3
GERO 232	Aging and Death	3
SOC 211	Methods of Social Research	3
GERO ELECT	Gerontology Electives	6
		18

Total : 63 CREDITS

[1] Recommended courses.

[2] This could also be used for **writing-intensive** and/or **cultural-diversity** credit.

HEALTH ADMINISTRATION

General Education

	Dept. and No.	Descriptive Title of Course	Credits
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	6
GE C/IL	C/IL 102	Computer and Information Literacy	3
GE HUMN	HUMN ELECT	Humanities Electives	9
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	6
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics or Theology II	3
GE ELECT	FREE ELECT	Free Electives	6
			33

Major/Cognate

HADM 111	Introduction to Health Administration	3
HADM 112	Health Systems	3
HADM 211	Health Administration	3
HADM 312	Health Finance	3
HADM 315	Cultural Diversity & Health Admin.	3
ACC 253	Financial Accounting	3
MGT 251	Legal Environment of Business	3
ELECT	Cognate Electives	6
		27

Total: 60 CREDITS

Dexter Hanley College students will meet the service-learning requirement by completing major courses that have a service-learning component. They will not be required to complete additional service-learning hours.

NOTE: Students who complete the associate degree in Health Administration and wish to continue toward the B.S. in Health Administration must have attained a 2.5 G.P.A. in the major.

HUMAN SERVICES

General Education

	Dept. and No.	Descriptive Title of Course	Credits
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	6
GE C/IL	C/IL 102	Computer and Information Literacy	3
GE HUMN	HUMN ELECT	Humanities Electives	9
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	6
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics or Theology II	3
GE QUAN-NSCI	QUAN-NSCI ELECT	Quantitative-Natural Science Electives	6
GE ELECT	FREE ELECT	Free Electives	6
TOTALS			**39**

Major/Cognate

HS 111	Introduction to Human Adjustment	3
HS 112	Human Services Systems	3
HS 241	Case Management & Interviewing	3
HS 242	Counseling Theories	3
HS ELECT	HS Elective	3
ELECT	Cognate Electives	6
		21

TOTAL: 60 CREDITS

Dexter Hanley College students will meet the service-learning requirement by completing major courses that have a service-learning component. They will not be required to complete additional service-learning hours.

NOTE: Students who complete the associate degree in human services and wish to continue toward the B.S. in human services must have attained a 2.5 G.P.A. in the major, and a 2.0 in the cognate courses.

HUMAN RESOURCES STUDIES

General Education

	Dept. and No.	Descriptive Title of Course	Credits
GE SPCH-WRTG	WRTG 107	Composition	3
GE SPCH-WRTG	COMM 100	Public Speaking	3
GE C/IL	C/IL 102	Computer and Information Literacy	3
GE HUMN	HUMN ELECT	Humanities Electives	3
GE HUMN	HUMN ELECT	Humanities Electives	3
GE HUMN	HUMN ELECT	Humanities Electives	3
GE PHIL-T/RS	PHIL 120	Introduction to Philosophy	3
GE PHIL-T/RS	T/RS 121	Theology I	3
GE PHIL-T/RS	T/RS 122-PHIL 210	Theology II or Ethics	3
GE ELECT	FREE ELECT	Free Electives	3
GE ELECT	FREE ELECT	Free Electives	3
TOTALS			**33**

Major/Cognate

HRS 111	MAJOR	Macro Human Resources	3
HRS 112	MAJOR	[1]Micro Human Services	3
HRS 251	MAJOR	Performance Appraisal	3
HRS 252[1]	MAJOR	[1]Workforce Education & Training	3
HRS 340	MAJOR	Compensation and Benefits	3
HRS 351	MAJOR	[1]Recruitment, Selection & Staffing	3
MGT 351	COGNATE	Principles of Management I	3
MAJOR	HRS ELECT	HRS Elective	3
COGNATE[2]	ELECT	[2]Cognate Electives	3
			27

TOTAL: 60 CREDITS

NOTE: Students who complete the associate degree in Human Resources and wish to continue toward the B.S. in human resourses must have attained a 2.5 G.P.A. in the major.

[1]Service learning course.

[2]May be any course that satisfies the cognate the cognate requirement for the B.S. degree in Human Resources.

POLITICAL SCIENCE

To earn the Associate of Science degree in Political Science the student must successfully complete 60 semester hours of credit. Of these, 48 credits must be earned in the liberal arts, according to a prescribed plan covering the humanities, philosophy, theology/religious studies, social/behavioral sciences, and natural sciences/mathematics. Twelve additional credits must be earned in the major field. The remaining six semester hours are allotted to free electives in either the area of specialization or any other field. An outline of the degree credit requirement is provided below.

Credits Required by Area of Study

General Education

	Dept. and No.	Descriptive Title of Course	Credits
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	6
GE C/IL	C/IL 102	Computer and Information Literacy	3
GE NSCI-QUAN	NSCI-QUAN ELECT	Natural Science-Math Electives	6
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	6
GE PHIL-T/RS	PHIL 210 or T/RS 122	Ethics or Theology II	3
GE S/BH	S/BH ELECT	Social/Behavioral Electives	9
GE HUMN	HUMN ELECT	Humanities Electives	9
GE ELECT	ELECT	Free Electives	6
			48

Major

PS 130-131	American National Government I-II	6
PS ELECT	Political Science Electives	6
		12

TOTAL: 60 CREDITS

SOCIOLOGY

General Education

	Dept. and No.	Descriptive Title of Course	Credits
GE NSCI	PHYS 107[1]	"Hands On" Physics	3
GE QUAN	QUAN ELECT	Mathematics Elective	3
GE S/BH	PSYC 110	Fundamentals of Psychology	3
GE S/BH	S/BH ELECT[2]	Social/Behavioral Electives	6
GE SPCH-WRTG	COMM 100-WRTG 107	Public Speaking-Composition	6
GE C/IL	C/IL 102	Computer and Information Literacy	3
GE HUMN	HUMN ELECT[3]	Humanities Electives	9
GE PHIL-T/RS	PHIL 120-T/RS 121	Introduction to Philosophy-Theology I	6
GE PHIL-T/RS	PHIL 210-T/RS 122	Ethics or Theology II	3
GE ELECT	FREE ELECT	Free Elective	3
			45

Major/Cognate

SOC 110	Introduction to Sociology	3
SOC 112	Social Problems	3
SOC 211	Methods of Social Research	3
SOC 231	Urban Sociology	3
SOC 318	Sociological Theory	3
SOC ELECT	Sociology Elective	3
		18

TOTAL: 63 CREDITS

[1] Recommended.
[2] Gero 110 or CJ 110 or PS 131 recommended.
[3] This could also be used for **writing-intensive** and/or **cultural-diversity** credit.

CERTIFICATES FOR ACADEMIC CREDIT

A Certificate Program is an educational opportunity to gain professional knowledge or training in a specific field before or after pursuing a degree. Students enroll in the undergraduate certificate programs with a variety of educational backgrounds ranging from having completed no college work to having earned a degree.

The courses a certificate student takes are part of the regular curriculum of the University. Certificate programs are comprised of eight academic credit courses that are recorded permanently on a transcript. Some certificates also include guided learning experiences.

In order to earn a certificate, a student must maintain at least a C average in the certificate courses and must successfully complete any other requirements as stipulated for a specific certificate program. Generally, no more than six credits may be transferred into a certificate program.

Application to a certificate program is made through the DHC Admissions Office. After a student's application is approved, the student is accepted into the program and may then register. A student is responsible for conferring with an advisor before registering and as needed in the course of earning the certificate.

In certain certificate programs, the required courses may be waived on the basis of prior experience.

Certificates available include Advertising/Public Relations, Chemical Abuse Counseling, Computer Information Systems, Gerontology, Health Administration, Human Resources Studies. The Business/Management certificates are Level I: Business; Level II: Accounting, Personnel Management, and Pre-MBA.

Students enrolled in a 24-credit certificate program, taking at least three credits per semester, may be eligible for financial aid. The Financial Aid Office should be contacted for further details.

CERTIFICATE IN ADVERTISING/PUBLIC RELATIONS *
(24 credits)

A program designed for adults who are seeking entry-level or advancement opportunities in advertising, promotion and public relations. Students with life-experience in advertising, promotion or public relations may wish to take the more advanced courses. An advisor should be consulted before doing so.

Required Courses:

COMM 120 Mass Communication
COMM 224 Newswriting (or COMM 324 Advanced Newswriting)
COMM 225 Advertising (or COMM 325 Advanced Copywriting)
COMM 226 Writing for Public Relations (or COMM 227 Public Relations)

Elective Courses (select four):

COMM 110 Interpersonal Communication
COMM 220 Responsibility in Communication
COMM 222 Television Production
COMM 227 Public Relations
COMM 311 Political Communication
COMM 312 Organizational Communication
COMM 314 Legal Communication
COMM 323 TV Journalism
COMM 324 Advanced Newswriting
COMM 325 Advertising Copywriting
COMM 326 Political Advertising
COMM 327 Public-Relations Cases
COMM 328 News Editing
COMM 329 Graphics
COMM 331 Mass-Media Management
COMM 334 Broadcast Programming
COMM 380 Advertising Practicum
COMM 410 Communication Theory & Research
COMM 411 Persuasion and Propaganda
COMM 425 Cable television
COMM 481 Internship
COMM 482 Directed Independent Study

*Some daytime courses will be required.

CERTIFICATE IN CHEMICAL-ABUSE COUNSELING

(24 credits)

This is a program designed for individuals who hold a bachelor degree in human services or a related field, or are matriculating in a baccalaureate program in human services or a related field; and are interested in pursuing careers in substance abuse counseling. This program has been approved by the Pennsylvania Chemical Abuse Certification Board for 45 hours towards certification, or 30 hours toward recertification.

NOTE: completion of the certificate program alone is only **one** of several criteria for state certification. State certification requires a **minimum** of a baccalaureate degree, 1500 hours of supervised clinical work experience in a drug and alcohol treatment facility or agency, and successful completion of a state-wide examination as specified for each level of certification. Detailed information on the state certification requirements are available in the Dexter Hanley College.

Required Courses:

HS 241 Case Management and Interviewing
HS 242 Counseling Theories
HS 421 Addictions
HS 422 Substance-Abuse Education
HS 423 Health and Legal Aspects of Substance Abuse

Elective Courses (select three courses):

HS 112 Human Service Systems
HS 323 Psychiatric Rehabilitation
HS 331 Health & Behavior
HS 334 Marital & Family Counseling
HS 341 Group Dynamics
HS 441 Crisis Intervention

CERTIFICATE IN COMPUTER-INFORMATION SYSTEMS

(24 credits)

This program is designed to introduce individuals to computers, and to expand the required math and programming skills needed for data analysis. The program targets:

1. Individuals presently in business who need to develop a greater familiarity with computer applications.
2. Individuals who are seeking to develop entry-level skills necessary for business computing.

Required Courses:

MATH 142 Discrete Structures *
CMPS 134 Computer Science I
CMPS 144 Computer Science II
CMPS 330 Information- Systems Analysis
CMPS 340 File Processing

Electives: (select 2 courses):

CMPS 240 Data Structures
CMPS 331 Systems Analysis and Design
CMPS 341 Database Systems

* Some prerequisite courses may be required, as determined by math-placement testing.

CERTIFICATE IN GERONTOLOGY[1]

(24 credits)

BASIC CERTIFICATE PROGRAM:

A program designed to meet the needs of persons currently employed in the field of aging by providing course work designed to increase and refine knowledge and practitioner skills.

Required Courses:

GERO 110 Intro. to Gerontology
GERO 230 Social Policy & Aging
GERO 232 Aging & Death

Electives (select five courses):

GERO 112 Social Problems of Aging
GERO 212 Aging & the Life Cycle
GERO 214 Aging & Human Behavior
GERO 216 Aging & The Community
GERO 218 Health & Aging[2]
GERO 220 Crime & Aging

ADVANCED CERTIFICATE PROGRAM:

A program for persons with some previous college experience who are considering a career in the field of Gerontology.

Required Courses:

GERO 110 Intro. to Gerontology
GERO 218 Health & Aging

Electives (select six courses):

GERO 112 Social Problems of Aging
GERO 210 Aging Around the World
GERO 212 Aging & The Life Cycle
GERO 214 Aging & Human Behavior
GERO 216 Aging & The Community
GERO 220 Crime & Aging
GERO 230 Social Policy and Aging
GERO 232 Aging & Death
GERO 382 Independent Study
GERO 480, 481 Practicum in Gerontology

[1] Some daytime courses may be required
[2] Recommended

CERTIFICATE IN HEALTH ADMINISTRATION

(24 credits)

A program for adults who seek to develop administrative skills in the field of health administration.

Required Courses:

HADM 111 Introduction to Health Administration
HADM 112 Health Systems
HADM 211 Health Administration
HADM 213 Supervising Health Personnel
HADM 312 Health Finance
HADM Electives (9 credits)

NOTE: Students who complete the Certificate in Health Administration and wish to continue toward the associate or B.S. degree in Health Administration must have attained a 2.5 G.P.A.

CERTIFICATE IN HUMAN RESOURCES STUDIES

(24 credits)

A program for adults who seek to develop administrative skills in the field of human resources.

Required Courses:

HRS 111 Macro Human Resources
HRS 112 *Micro Human Resources
HRS 251 *Performance Appraisal
HRS 252 *Workforce Education and Training
HRS 340 Compensation and Benefits
HRS 351 *Recruitment, Selection, and Staffing
MGT 351 Principles of Management I
HRS -- HRS Elective

NOTE: Students who complete the Certificate in Human Resources and wish to continue toward the associate or B.S. degree in Human Resources must have attained a 2.5 G.P.A.
*Service learning course.

CERTIFICATE PROGRAMS IN BUSINESS/MANAGEMENT

LEVEL I

The Level I Certificate Program in Business will comprise 24 credits, with no more than six credits allowed by way of transfer from another college. The Level I program is open to any qualified students (i.e., those who meet the DHC entrance requirements).

BUSINESS
(24 credits)

MGT 161	Introduction to Business
ACC 253, 254	Financial Accounting — Managerial Accounting
ECO 153, 154	Principles of Microeconomics, Macroeconomics
MGT 251	Legal Environment of Business
C/IL 104	Computing and Information Literacy
Free Elective	(Advisor Approved)

LEVEL II

Level II certificate programs will comprise 24 credits, with no more than six credits allowed by way of transfer from another approved college. Level II programs are open only to students who have achieved junior status, and have completed the appropriate Level I program, or to post-baccalaureate self-improvement students. In the latter case, students may be required to take prerequisite courses for any required courses in the certificate program.

The Level II certificate in Accounting, plus an earned baccalaureate degree, provides the student with adequate course work to meet Pennsylvania's requirement to sit for the C.P.A. examination. However, both New York and New Jersey require additional credits in Finance (six credits) and Business Law (six credits) to sit for the exam. (For one of the additional courses in Finance, one of FIN 361, 362 or 475 is recommended. One of these courses could be taken as the Free Elective in Level I.) Students should consult an advisor in The Kania School of Management to ensure that they take the correct courses to satisfy the requirements of states other than Pennsylvania.

ACCOUNTING

(24 credits)

ACC 251, 252 Financial Accounting I, II

ACC 361, 362 Intermediate Accounting I, II

ACC 363, 364 Federal Taxes – Auditing Theory

ACC 461, 470 Cost Accounting – Law for Accountants

PERSONNEL MANAGEMENT

(24 credits)

MGT 351 Principles of Management I

MGT 352 Principles of Management II

MGT 361 Human Resource Management

MGT 362 Employee-Management Relations

MGT 460 Organization Theory

MGT 471 Group Dynamics

Free electives: Six credits, approved by advisor.

PRE-MBA

(24 credits)

Students should have basic computer knowledge before beginning this program.

ACC 210 Survey of Managerial & Financial Accounting (or ACC 253 & 254)
ECO 210 Essentials of Economic Theory (or ECO 153 & 154)
FIN 351 Introduction to Finance
MKT 351 Intro. to Marketing
MGT 251 Legal Environment of Business
MGT 351 Principles of Management I
OIM 210 Quantitative Methods I (or MATH 106 & 107)
OIM 211 Quantitative Methods II (or STAT 251 & OIM 351)

TELECOURSES

Telecourses provide students with an opportunity to study with a more flexible schedule. Courses are normally shown one hour per week on the regional PBS affiliate, WVIA-TV. Meetings with instructors are reduced from the typical three hours per week to no more than six meetings per semester. These courses are geared to highly motivated students capable of doing independent work. (Courses offered vary each semester.)

ONLINE COURSES

Many courses at the University require that students have access to a computer and internet for assignments, research, discussion groups, etc. The University provides each student with an account number and there are computer labs on campus for student use. In addition, a number of faculty are using CourseInfo (Blackboard) to support or to teach the entire course. CourseInfo is the standard university web-courseware tool that enables an instructor to supplement a course with online materials and activities, or to deliver a course solely online. CourseInfo contains modules for announcements, course documents, online tests/quizzes, discussion board, chat and assignments.

Students can use the CourseInfo site to get more information about class notes, find pertinent websites that enhance the classroom discussion, and collaborate via the discussion board and/or chat room with the instructor and the other students.

CourseInfo is one of the most widely used courseware tools in higher education today. Due to its ease of use, intuitive navigation, and pleasant graphic interface, the tool is accessible to all students, from novice to advanced computer users.

At The University of Scranton, CourseInfo is also used to deliver courses solely online. The class documents are posted on the web and the students are responsible for submitting the assignments using the provided tools in CourseInfo. There are virtual office hours via the chat room when the instructor can communicate with one or several students simultaneously.

To find out more about CourseInfo, the computer equipment you need, and what you need to know before taking an online course, visit The University's CourseInfo page located at http://www.scranton.edu/ci

CREDIT FOR ACADEMICALLY RELEVANT LEARNING

Dexter Hanley College provides opportunities for students to earn credit for university-level learning that takes place outside the classroom setting. A maximum of 30 credits will be awarded for extra-institutional learning, excluding military credit. This includes CLEP, Excelsior College Examination, ACE-approved credit, portfolio credit, and PONSI credit. (Advanced-placement credit is considered separately.)

College-Level Examination Program (CLEP)

The College-Level Examination Program has been established to enable students of all ages to earn college credit by examination. Through the CLEP tests, applicants may gain credit in many academic subjects applicable to their degree programs. Individuals who wish information about these examinations should consult the Dexter Hanley College Director of Advising or write directly to the Program Director, College-Level Examination Program, College Entrance Examination Board, Box 1824, Princeton, N.J. 08540.

Assessment of Prior Learning

Many students have acquired "experiential learning" outside a formal college or university classroom in jobs, military service or non-accredited institutions. One who wishes to have this learning assessed for possible credit will enroll in the one-semester course, EDUC 101, to document relevant experiences and the knowledge gained from them for departmental review. Faculty evaluators from the appropriate department(s) should evaluate the portfolio and may recommend a credit award for the student's learning. For further information about this program, contact a Dexter Hanley College advisor (941-7580).

Challenge Examinations for Physical Therapist Assistants

Physical therapy majors who are physical therapist assistants (PTA) and have graduated from a PTA program accredited by the Commission on Accreditation in Physical Therapy Education may petition to be exempt from the following courses by challenge examination.

- PT340 Basic Techniques in Patient Management
  (2 credits lecture, 1 credit lab)
- PT376 Therapeutic Modalities I(1 credit lecture, 1 credit lab)
- PT 378 Therapeutic Modalities II (1 credit lecture, 1 credit lab)

Challenge examinations will include, at a minimum, all final written and practical examinations covering all content areas normally given for each course. Majors who are PTAs must achieve a score of at least 77.00% (C) in all content areas to pass the examinations and earn the exemption. The PT Department professor responsible for the course will give and grade the examinations.

Upon successful completion of challenge examination(s), the designation "CR" will be applied to the student's transcript for the appropriate course(s). Students who successfully complete challenge examination(s) and receive "CR" designations for corresponding courses are not required to take additional courses to "make-up" the credits successfully challenged.

Majors who are PTAs and who wish to challenge any of the courses listed above should submit their request in writing to the PT Department Chairperson. The request must be submitted by the end of the quarter for the semester preceding the semester during which the student would normally take the course.

EDUC 101 Dr. Adams
Fundamentals of Adult Development and Experiential Learning 3 credits
The course provides learners with a basic knowledge of adult learning and development theories as a framework for understanding themselves as learners. Through self-assessment of their learning styles, personality factors, value systems, interests, and previously acquired learning, they will gain an understanding of the factors which facilitate and/or inhibit their pursuit of higher learning. This course also assists learners in developing a portfolio of their learning experiences to be reviewed for college. Dexter Hanley students only; permission of instructor required.

ACADEMIC REGULATIONS

Sequences of Study/Prerequisites

Students enrolled in degree programs in Dexter Hanley College are strongly advised to follow the sequence of studies listed for their chosen major as closely as possible. So students may be assured of having the adequate background for the successful completion of certain courses, prerequisite courses are sometimes listed. The course descriptions in the earlier pages of this bulletin contain the necessary information on prerequisites. In some cases practical experience may compensate for the lack of prerequisite courses, but such requests for exceptions must be approved by the departmental advisor. Students should also check with their departments for specific scheduling information on course sequences in their major. Since not all required courses are offered each semester, careful planning should be done in advance to assure smooth progress through the degree program.

Dexter Hanley College students should consult this catalog for academic regulations common to all four undergraduate colleges of the University. They should be aware of the following policies which relate specifically to those enrolled in Dexter Hanley College:

Dean's List

Since many students in Dexter Hanley College are enrolled on a part-time basis, the Dean's List criteria for this school differ somewhat from those of the day schools. Students in DHC may earn Dean's List distinction provided they carry at least two courses (at least six credits) during the semester and earn at least a 3.50 grade-point average with no grade code of NG, I, C-, D+, D, F or U. The Dean's List is published at the end of the fall and spring terms each year.

CAMPUS LIFE

Students should consult the Dexter Hanley College Student Handbook for information about such practical matters as I.D. cards, parking permits and opportunities for participation in various aspects of University life. Dexter Hanley College participation in campus government is provided though the Dexter Hanley College Student Government and through Dexter Hanley College representation on the University Senate.

TUITION AND FEES 2002-2003

Dexter Hanley College Tuition: (full-time)	$564	per credit
(part-time)	$472	per credit
(all Intersession courses)	$564	per credit
University Fee for Hanley Students: (full-time)	$515	per semester
(part-time)	$35	per semester
Royal Card Photo	$20	
Schedule Change Fee	$15	per change form
Health-Service Fee (full-time)	$65	per semester
Recreational Complex Use Fee (optional for part-time students):	$70	per semester
Application Fee for Hanley Students:	$20	
Orientation Fee for Hanley Students:	$30	
Prior-Learning-Portfolio Review Fee:	$30	per credit
Credit by Exam:	$75	per credit
Prerequisite challenge exam:	$15	per exam
Nursing Clinical Practicum:	$110	per clinical course
Graduation Fee:	$190	

The orientation fee is refunded only when a student withdraws from the University prior to orientation.

Full-time students in Dexter Hanley College who can justify having the recreational and athletic (both parts of the University fee) and health services fee waived may petition the Dean of the College in writing for a waiver. This must be done each semester.

Full-time students who drop to part-time status after the 100% refund deadline will not have an adjustment in tuition and fees for the semester.

FAMILY TUITION REDUCTION

Whenever at least one dependent child from a family or a spouse is in attendance at the University as a full-time undergraduate student, a special family tuition-reduction policy will apply to a parent/spouse enrolled as a full-time student in Dexter Hanley College. The amount of tuition credit that will be awarded each semester will be calculated after other financial aid has been applied by the Bursar's Office personnel. Forms and additional information may be obtained from the Bursar's Office or from Dexter Hanley College.

TUITION POLICY FOR SENIOR CITIZENS

Persons 60 years of age or older may audit undergraduate courses at the University through Dexter Hanley College at no tuition charge on a "space-available" basis. Fees and other costs of courses (e.g., textbooks) are assessed at the normal rate. The student must complete the senior-citizen-tuition waiver form and the registration process, including returning the remittance form.

Persons 60 years of age or older may take undergraduate courses for credit through Dexter Hanley College at 50 percent tuition. These reductions are applicable only after the person has applied for and received any form of financial assistance normally available (e.g., state and federal assistance, and employer reimbursement). The student must complete the senior-citizen-tuition waiver form and the registration process, including returning the remittance form.

Senior-citizen students must complete the full application process, including submission of all official transcripts.

PRE-COLLEGE PROGRAMS

University of Success

Each year 20 seventh-grade students from local school districts are selected to participate in the University of Success program. Students with a C-B grade average and who are academically able to achieve higher grades are typically selected for the program. Students who are underrepresented in higher education are encouraged to apply. Selection is made by April 1 each year.

University of Success provides academic, social, and cultural opportunities to enable students to complete high school successfully and gain entrance to a college or university. Services such as summer enrichment programs, tutoring, mentoring, Saturday programs, PSAT/SAT preparation, and college/career planning are offered to students from the time they begin the program until they graduate from high school.

For more information, students should contact their school counselor or The Dexter Hanley College, at (570) 941-7580.

Time Travelers

A three-week summer program sponsored by The University of Scranton for high achieving sixth-, seventh-, and eighth-grade students, Time Travelers students are immersed in subject matter from a time period and learn thematic lessons that include science, math, literature, art, history, and drama from that era.

The residential program allows students to experience many aspects of college life as they attend daily classes, live in dorms, eat in campus dining halls, and participate in nightly academic, social, and recreational activities. Residential students arrive each week on Sunday at 6:00 p.m. and depart each Friday at 5:00 p.m. A commuter option allows students to participate in the 9 a.m. - 3 p.m. daily schedule. Limited scholarships are available.

Students with a B or better grade-point average are eligible for the program. Students with grade-point averages below a B may be admitted if they obtain a letter of recommendation from a school official. All students must include a current grade report with the program application. Participation is limited and students are selected on a first come, first served basis. For more information, contact The Dexter Hanley College, at (570) 941-7580.

Arts Alive

Arts Alive is an intensive four-week program for students in grades 9, 10, and 11 who are interested in the arts. Professional artists teach courses in painting, sculpture, photography, three-dimensional art, theatre, dance, music, poetry, and television and radio communications. K-12 teachers can also participate in the program as students and earn six graduate credits from the University of the Arts or six Pennsylvania in-service graduate credits.

Arts Alive is sponsored by The University of Scranton; NEIU #19; Keystone College; local school districts; the Pennsylvania Council of the Arts; the University of the Arts, Philadelphia; and Fleet Bank.

Residential or commuter options are available. Many school districts offer scholarships for artistically talented students. For additional information, students should contact their high school counselor or The Dexter Hanley College, at (570) 941-7580.

FINANCIAL AID FOR DEXTER HANLEY COLLEGE STUDENTS

At the present time Hanley College students are eligible to apply for several forms of federal and state financial aid. Eligibility for all grants, loans, and institutional aid requires the student to submit the University Application for Scholarship and Financial Aid and the Free Application for Federal Student Aid (FAFSA). The student must also submit signed copies of the tax information for the student and spouse/parent (if required). Priority deadline for incoming students is May 1st. Returning students must file by April 15th.

In addition to the federal and state financial-aid programs, Hanley students are eligible to apply for the following institutional-aid programs.

Pennsylvania Higher Education Assistance Agency

Dexter Hanley College students are eligible to apply for PHEAA grants if they are taking six credits a semester.

Pell Grants

Dexter Hanley College students taking at least three credits a semester are eligible to apply for federal grants administered under the Pell Grant program.

Dexter Hanley Full-time and Part-time Grants

Full-time and part-time grants are awarded to Hanley College students who demonstrate need, academic progress, and enrollment status of at least six credits. Awards range from $500 to $3,500/yr.

The Eugene J. Donahue Scholarship Award Fund See page 38.

Rev. John J. Fitzpatrick, S.J., Scholarship See page 39.

Dexter Hanley College Student-Government Scholarship

This limited-tuition scholarship is available to DHC students with demonstrated financial need who have completed six or more credits (including transfer credits). Both full- and part-time students are eligible, as are DHC student government members. Those who are not eligible for this scholarship include students working toward a second degree and university employees with full tuition remission. Grade point average is not a consideration when considering financial need.

Robert L. McDevitt Scholarship See page 42.

Newcombe Scholarship for Mature Women

The Charlotte W. Newcombe Foundation provides limited-tuition scholarships for mature women students completing their education in preparation for a second career. These scholarships, available to women 25 years of age or older who have completed at least 60 credits, are available in any of the schools of the University of Scranton, but each year most are awarded to women enrolled in Dexter Hanley College.

New Transfer-Student Scholarship

Transfer students who have completed at least 30 credits at their previous institution and intend to pursue full-time studies at The Universityof Scranton are eligible to apply for this award. This is an academic as well as need-based scholarship. The award may be renewed until graduation upon maintenance of required grade-point average.

Oppenheim Family Award See page 44.

The Thomas P. White Award See page 46.

Accounting Scholarship

The Northeast Chapter of the Pennsylvania Society of Public Accountants has endowed a scholarship fund awarding one limited tuition scholarship each year to an Accounting major in Dexter Hanley College.

Dexter Hanley College Deans' Scholarship and Loan Fund

The Dexter Hanley College Deans' Scholarship and Loan Fund provides monies for scholarships and loans to allow adult and non-traditional students who experience unexpected financial difficulties to complete their education and fulfill personal and professional goals.

Federal Stafford Loan

Hanley College students are eligible to apply for Stafford Loans if they are taking at least six credits per semester.

SAINT PIUS X SEMINARY

Faithful to the vision of the National Council of Catholic Bishops' document, *Program for Priestly Formation*, the Diocese of Scranton enjoys a cooperative arrangement with the University to enable seminarians to prepare for the intensive study of theology beyond the undergraduate level. Men who are seriously discerning the possibility of a vocation to the diocesan priesthood reside together in community at Saint Pius X Seminary in Dalton. Seminarians share in communal celebration of the liturgy, deepen their own prayer lives through indiviual spiritual direction, undertake practical apostolic service, and gain insight into the daily life of a priest. On campus, seminary students fulfill a Philosophy major (30 credits) in the University's College of Arts and Sciences and study a range of theological topics (18 credits) to provide a solid foundation for advancement to major seminary. In addition, seminarians pursue courses in history and languages, as well as electives that will futher enrich their undergraduate curriculum so that candidates for priesthood possess an intellectual formation truly reflective of the liberal arts tradition. While seminarians must enroll in general education courses required of all undergraduates, in addition to the seminary curriculum, they also possess the flexibility to develop a concentration, that is, a minor or double major, in another field of study that appeals to their personal interests. Seminarians are encouraged to avail themselves of the breadth of educational opportunities available to them at the University campus.

Students accepted into seminary formation who have already earned a bachelor's degree or who undertake college studies at a non-traditional age enter the Unversity's Dexter Hanley College, which aims to accommodate the particular needs of the non-traditional college student. Seminarians in this category who have not yet obtained a college degree follow the typical seminary curriculum toward a bachelor's in Philosophy. Those who possess a degree complete a two year pre-theology program focusing on the philosophy and theology prerequisites necessary to begin advanced theological study in major seminary.

Saint Pius X Seminary is operated by the Diocese of Scranton under the direction of the Most Reverend James C. Timlin, D.D., the Bishop of Scranton. The seminary formation faculty consists of priests of the Diocese; however, the seminary program serves students from beyond Northeastern Pennsylvania, including the Archdioceses of Baltimore and Washington.

For more information, contact Monsignor David Bohr, S.T.D., at (570) 563-1131.

SPECIFIC COURSE REQUIREMENTS

Seminarians in the *four-year college program* normally major in Philosophy and are expected to take the following courses in fulfillment of the general requirements of the Philosophy Department and St. Pius X Seminary. Seminarians enrolled in the *two-year pre-theology program* are required to take the courses listed below that are marked by an asterisk (*):

PHILOSOPHY

PHIL 120	Introduction to Philosophy*	PHIL 310	Epistemology*
PHIL 210	Ethics*	PHIL 311	Metaphysics*
PHIL 215	Logic	PHIL 330	Fate, Destiny, and Dignity
PHIL 220	History of Ancient Philosophy*		
PHIL 221	History of Medieval Philosophy*	PHIL 434	Issues in Philosophy and Theology*
PHIL 222	Modern Philosophy*		

THEOLOGY

T/RS 121-122	Theology I-II*	T/RS 222	Introduction to Liturgical Theology*
T/RS 184C	Inside the Catholic Tradition*		
T/RS 230	Moral Theology*	T/RS 210	The History of Christian Theology

LANGUAGE

LAT 111-112	Elementary Latin *
SPAN 101-102	Elementary Spanish
GRK 111-112	Elementary Greek

INTERDISCIPLINARY

INTD 201-202C	Christian Classics

GENERAL EDUCATON REQUIREMENTS

WRTG 107	Composition	COMM 100	Public Speaking
C/IL 102/102L	Computing and Information Literacy		

*Pre-theology program (2 years; 60 credits)

The Graduate School

The Graduate School offers advanced study in a variety of professional fields as well as in the humanities and sciences. Its students are drawn from throughout Northeastern Pennsylvania, several surrounding states and from over 20 foreign countries. The students are pursuing master's degrees, various types of certification and personal enrichment.

MASTER'S DEGREE PROGRAMS

The University offers master's degrees in the 22 different programs listed below. Programs for supervision, superintendent's letter of eligibility, and teacher's certification are also available.

Biochemistry
Business Administration (MBA)
Chemistry
Clinical Chemistry
Community Counseling
Early Childhood Education
Elementary Education
Elementary-School Administration
English
Health Administration (MHA)
History
Human Resources Administration
Nursing
Occupational Therapy
Physical Therapy (MPT)
Reading
Rehabilitation Counseling
School Counseling Clinical
Rehabilitation Counseling
Software Engineering

ADMISSIONS REQUIREMENTS

Applicants for admission should submit a completed application form, $50 application fee, three letters of reference and official copies of their transcripts. In addition to these requirements, which apply to all programs, individual programs may have special requirements such as test scores, personal interviews or writing samples. Consult the Graduate School catalog for these special requirements.

International students whose native language is not English must submit scores from the Test of English as a Foreign Language (TOEFL). Scores required on this test for admission vary by program. Consult the Graduate School catalog for minimum scores applicable to each program.

All application documents should be on hand in the Graduate School Office at least one month before the intended starting term. Consult the Graduate School catalog for more stringent deadlines for the Counseling, Health Administration and Nursing programs. International students should have their credentials in the Graduate School Office at least three months before the term in which they would like to begin their studies. Students may begin their studies in fall, spring, or summer. Software Engineering, Counseling, and Health Administration students may begin their studies only in the fall semester.

COMBINED BACCALAUREATE/MASTER'S DEGREE PROGRAM

Undergraduate students often plan to pursue graduate study either in their undergraduate specialty or in another field of endeavor.

For the University's undergraduate student whose major field of study is in Accounting, Biochemistry, Chemistry, Computing Sciences, Health Administration/Human Resources, History, Human Services, or Nursing; who excels within his/her major field of study early in an undergraduate career; and who is positioned to and also desires to pursue advanced study in that field of endeavor, that student may have the opportunity to be admitted to a graduate program prior to obtaining a baccalaureate degree. This allows that student opportunity to pursue graduate course work in his/her major field while completing the other undergraduate requirements for graduation.

The undergraduate student who excels, in general, and desires to pursue graduate work in a field of endeavor other than his/her undergraduate major (often in a professional graduate program), may have the opportunity to be admitted to that graduate program prior to obtaining a baccalaureate degree in order to undertake graduate-course work at an appropriate time in his/her development (often prior to completing the requirements for the baccalaureate degree).

Departments housing undergraduate programs may allow some graduate-course work to satisfy undergraduate degree requirements (not to exceed 12 credit hours). In participating undergraduate programs, the student's undergraduate program advisor will recommend the undergraduate-course work for which graduate credits may be substituted.

The selection of the graduate-course work, the particular credits to be applied toward an undergraduate degree, and a prospectus of study require the approval of the student's undergraduate program advisor, the chair of the department housing the student's undergraduate-degree pro-

gram, the graduate-program director in the student's academic discipline, the appropriate undergraduate-program dean, and the dean of the graduate school.

The Combined Baccalaureate/Master's Degree student will be expected to complete his/her baccalaureate degree no later than the semester in which he/she completes the master's degree. Often, the student entering the combined Baccalaureate/Master's Degree program will complete both programs during a five-year time period.

For further information concerning possible participation in the Combined Baccalaureate/Master's Degree Program please refer to the Graduate Catalog of the University of Scranton (or contact the Graduate School - (570) 941-7600). In addition, you may contact

Accounting: Dr. Wayne Cunningham	(570) 941-4387
or Dr. Michael O. Mensah	(570) 941-7569
Chemistry, Biochemistry: Dr. Christopher Baumann	(570) 941-6389
or Dr. David Marx	(570) 941-7511
Computing Sciences: Dr. Yaodong Bi	(570) 941-6108
or Prof. Richard Plishka	(570) 941-6111
Counseling & Health Services: Dr. Oliver J. Morgan	(570) 941-6171
or Dr. Ann Marie Toloczko	(570) 941-6172
Health Administration/Human Resources:	
Dr. Peter C. Olden	(570) 941-4350
History: Dr. Raymond Champagne	(570) 941-7428
or Dr. Michael DeMichele	(570) 941-7443
Nursing: Dr. Mary Jane Hanson	(570) 941-4060
or Dr. Patricia Harrington	(570) 941-7673

GRADUATE ASSISTANTSHIPS

Approximately 60 graduate assistantships are available each year. Students awarded assistantships receive stipends and are entitled to tuition scholarships.

Applicants for graduate assistantships must have an Application for Admission form on file in the Graduate School Office. Applications for graduate assistantships must be submitted by March 1. Awards are made on the basis of the student's academic record, experience and promise as a graduate student. International students are not eligible for graduate assistantships in their first semester.

Graduate students can also apply for Guaranteed Student Loans (GSL) and Federal Work-Study.

SCHEDULING

Most classes are offered from 4:30 p.m. - 7:10 p.m., and 7:20 p.m. - 10:00 p.m., Monday through Thursday in the fall and spring terms. Almost all courses meet one night per week. Summer and intersession classes are also available.

CORRESPONDENCE

For additional information, please write, call, FAX or visit our web site: http://www.scranton.edu/graduate school

Address:
The Graduate School
University of Scranton
Scranton, Pennsylvania 18510 - 4631

Phone: (570) 941-7600
1-800-366-4723 (within U.S.A.)
Fax: (570) 941-5995
Email: goonanj1@scranton.edu

Honors and Interdisciplinary Programs

In the tradition of Jesuit education, the University offers special interdisciplinary and honors programs for highly motivated students. These programs foster a desire, not just to know the facts of a particular subject, but to become confident seekers of knowledge, a skill that remains long after graduation.

HONORS AND INTERDISCIPLINARY PROGRAMS

SPECIAL JESUIT LIBERAL ARTS PROGRAM (SJLA)

REV. RONALD McKINNEY, S.J., Director

The University's SJLA Program, available by invitation to incoming freshmen, provides an alternate way of fulfilling a student's General Education requirements. Students not selected initially may apply for admission as second semester freshmen or as sophomores. Courses for SJLA program participants, who are drawn from all different majors, attempt to foster the following skills which University graduates have found particularly useful in law, medicine, business, and graduate school:

1. An understanding of key achievements in the literature, history, philosophy, theology and science of the Western classical and Christian heritage;
2. An ability to apply logical, systematic, and critical reflection to any given intellectual problem;
3. An understanding of and sensitivity toward the contemporary problems of our day;
4. An outstanding ability to communicate clearly and persuasively one's ideas through both the spoken and written word (what Jesuits have historically referred to as "eloquentia perfecta").

Students are expected to become involved in extracurricular and service activities on campus if they wish to remain in SJLA. Many participants also take advantage of the opportunities for foreign study, for earning a double major in philosophy, and for joining the Honors Program if invited during their sophomore year. Above all, participants are expected to seek out and interact with the professors and other students in this community of learning, which is under the direction of Rev. Ronald H. McKinney, S.J.

Dept. and Number	*Fall Semester*	*Spring Semester*		*Credits*
		FIRST YEAR		
MAJOR/COGNATE	Major/Cognate	Major/Cognate	6-9	6-9
Foreign Language	Modern or Classical	Modern or Classical	3	3
PHIL 120J-210J	Intro. to Philosophy	Ethics	3	3
T/RS 121J-Elective	Theology I	Elective	3	3
FSEM - PHED	INTD 100	Physical Education	1	1
			16-19	**16-19**
		SECOND YEAR		
MAJOR/COGNATE	Major/Cognate	Major/Cognate	9-12	9-12
Elective-T/RS 122J	Elective	Theology II	3	3
PHIL 217J-311J	The Trivium	Metaphysics	3	3
PHED	Physical Education	Physical Education	1	1
			16-19	**16-19**
		THIRD YEAR		
MAJOR/COGNATE	Major/Cognate	Major/Cognate	9	9
Elective-INTD 110J	Elective	The Jesuit Magis	3	3
HUMN 311J-312J	Masterworks I	Masterworks II	3	3
PHIL 322J-Elective	Philosophy of Conscience	Elective	3	3
			18	**18**
		FOURTH YEAR		
MAJOR	Major	Major	6	6
Electives	Elective	Elective	3	3
PHIL 413J-419J	The End of Philosophy	Philosophy East and West	3	3
T/RS 314J-Elective	The Religions of the World	Elective	3	3
			15	**15**

Total: 130-142 credits,
Depending on major

PHIL 120J Fr. McKinney
Introduction to Philosophy 3 credits
The aim of this course is to awaken in the student an appreciation of the nature and method of philosophical inquiry through an examination of key texts which grapple with the central questions that have arisen in the history of philosophy.

PHIL 210J Dr. Klonoski
Ethics 3 credits
Through the presentation of a select history of moral philosophy, students are introduced to the philosophical discipline of ethics. Original texts of such thinkers as Plato, Aristotle, Epicurus, Epictetus, St. Augustine, Hobbes, Kant, Mill, and Nietzsche are enlisted to explore the most fundamental question in ethics, "What is the good life?"

PHIL 311J Dr. Baillie
Metaphysics 3 credits
A textual inquiry into the adequacy of philosophical responses to the fundamental question, "What Is?" Special attention will be given to Aristotle, Hume, Kant, and Nietzsche.

PHIL 217J Dr. Whittaker
The Trivium 3 credits
Via numerous writing projects and speeches and the analysis of select philosophical texts, this practicum in grammar, logic, and rhetoric will encourage the student to connect the basic elements of reason, discourse, and persuasion.

PHIL 322J Dr. Black
Philosophy of Conscience 3 credits
Studies the role of conscience in moral judgement and considers its metaphorical, narrative, and ironic elements. Explores the difference between clarity and community, truth and wisdom, mind and person, principle and prudence as we study possible links between conscience, reason, eros, imagination, and education in some of the works of Plato, Kant, Marx, Vico, and St. Augustine.

PHIL 413J Dr. Rowe
The End of Philosophy 3 credits
The purpose of this course is to draw together into a meaningful whole the materials studied in SJLA philosophy courses thus far. The course concerns the end of philosophy in two senses: First, the course will seek to evoke a sense of the purpose of philosophy not only within the academy, but in public life, in personal development, and even in the evolution of Western and world culture. Second, the course will raise the question of philosophy's alleged "completion," "exhaustion," or "destruction" as discussed by certain twentieth-century philosophers.

PHIL 419J Dr. Pang-White
(P, D) Philosophy East and West 3 credits
This course is to function as a capstone course of the SJLA program by bringing non-Western philosophy and philosophers into a dialogue with Western philosophy and philosophers on major philosophical topics. The aim is to build upon what students have learned from previous SJLA courses and to further expand and enrich their philosophical understanding through a multicultural and comparative-philosophy approach. To achieve this aim, important primary texts from both Western and non-Western traditions will be studied.

T/RS 121J
(P) Theology I: Dr. Bader-Saye
Introduction to the Bible 3credits
A survey of central texts and themes of the Bible. Its purpose is to develop biblical literacy as well as skills in interpreting various literary forms and key theological concepts.

T/RS 122J Sr. Foley, C.N.D.
(P) Theology II: Introduction 3 credits
to Christian Theology
(Prerequisite: T/RS 121) A survey of key Christian themes: creation, Christ's incarnation and redemption, the Church and sacraments, Christian personhood, and the practice of prayer, virtue, and hope for the future.

T/RS 314J Dr. Steele
The Religions of the World 3 credits
An exploration of belief in the traditions of the classical historical religions of the world through both systematic analysis and the reading of sacred texts.

INTD 110J Prof. Curran
The Jesuit Magis 3 credits
The purpose of this course is to teach students how to co-ordinate several themes into an integral whole: 1) Jesuit commitment to faith and justice, in terms of the Magis; 2) a multi-disciplinary approach to the investigation of certain key social and cultural problems on the international, national and local levels; 3) analysis and critique of socio-economic features of various cultures, guided by the values inherent in Jesuit education, with special attention paid to philosophical and theological resources; 4) service to others as a concrete response to social analysis, complemented by guided reflection upon the experience of service.

HUM 311J-312J Dr. Zola/Dr. Casey/ Fr. McKinney
Masterworks I-II 6 credits
In this team-taught, year-long seminar, students will read some of the great classics of world literature, learn how to facilitate their own discussions, write a comparative analytic paper, and be orally examined by a host of volunteer professors.

Electives and Exemptions: The five or six electives (beyond the two-semester language requirement) are intended to be used towards courses in math, computer literacy, and the natural and social sciences. There are always exemptions made to ensure that everyone takes at least 130 credits but no more than a credit-heavy major requires. Special exemptions may also be possible for those participating in foreign study, in Honors, or in a difficult double major or minor.

SJLA students are eligible to apply for the Christopher Jason Perfilio Memorial Scholarships awarded each year since 1995.

HONORS PROGRAM

DR. ELLEN CASEY, Director

The Honors Program at The University of Scranton concentrates on directed independent work for selected students who desire greater depth and breadth in their education. The Honors curriculum is designed to fit into existing University course requirements and to support students as they move into increasingly independent work. The sophomore courses, open only to Honors students, enable them to meet a University general-education requirement on a more advanced level.

Junior Honors students take tutorials both in and out of their majors. A tutorial is an exploration of a topic on an individually directed basis; the student meets with a faculty mentor weekly throughout the semester. Each Honors student must take three tutorials, at least one in the major and one out of the major or in the second major. The student may take a fourth and fifth tutorial. These tutorials count toward major, minor, cognate, or general education requirements.

In the Honors seminars a small group of Honors students meets weekly with the director and assistant director for student-led discussions. The junior seminar is based on an interdisciplinary reading list; the senior seminar is based on the senior Honors projects.

There is no tuition charge for these seminars, since they are the only Honors requirements which do not satisfy ordinary graduation requirements.

Senior Honors students do a year-long, six-credit project in their majors, working under the guidance of a professor to explore a specialized topic, either academic or professional in nature. Upon completion, the project is defended before a board of three faculty members who judge whether it is of Honors caliber.

There is no extra charge for Honors work. In addition, honors students who pay flat tuition may take between 12 and 21 credits in their third and fourth years at the flat rate.

ADMISSION TO THE HONORS PROGRAM

Applications are accepted every fall from those students who have at least eighteen hours of college credit and who expect to graduate after three more years of work at the University. Applicants must ordinarily have at least a 3.3 GPA; a minimum of a 3.5 GPA (cum laude) is required for graduation in the Program. The number of spaces in the program is limited, and admission is based on the applicant's high school and college records, SAT scores, application, recommendations, and interviews. For further information contact Dr. Ellen Casey, Director of the Honors Program.

SCHEDULE

	Fall	Spring
Sophomore Year:	Application	HUM 286H or NSCI 286H
Junior Year:	1 or 2 tutorials	1 or 2 tutorials HONR 387H: Junior Honors Seminar
Senior Year:	Honors Project HONR 489H: Senior Honors Seminar	Honors Project Defense of Project

HUM 286H
(C,W)Victorian Studies
This course uses literature to explore 19th-century British social and intellectual history. Focusing on the period from 1832-1901, it examines Victorian attitudes toward industrialization, religion, art and gender.

HUM 286H Dr. Ellen Casey
(C,W)Victorian Studies 3 credits
This course uses literature to explore 19th-century British social and intellectual history. Focusing on the period from 1832-1901, it examines Victorian attitudes toward industrialization, religion, art and gender.

NSCI 286H Dr. Christopher Baumann
(E)Elements of Natural Science 3 credits
This course presents an overview of the methods of the natural sciences. The applications of these methods in the solution of historical and modern problems will be discussed. Possible topics include: atmospheric and oceanic chemistry, relativity, quantum theory, and chaos.

Honr 387H Drs. Casey and Baumann
Junior Honors Seminar 2 credits
Student-led discussions of contemporary non-fictional works chosen for their variety and their importance. The seminar does not satisfy any general education requirements.

Honr 489H Drs. Casey and Baumann
Senior Honors Seminar 1 credit
Student-led discussions of the content, rationale, and methodology of Senior Honors Projects. This seminar does not satisfy any general eduation requirements.

Dept 385H-389H Staff
Honors Tutorial 3 credits
An exploration of a topic on an individually directed basis.

Dept 487H-489H Staff
Honors Project 3 credits
An independent project of academic or professional nature culminating in an oral defense before a board of three faculty members.

No Honors Program coursework may be taken on a Pass-Fail Basis.

THE BUSINESS LEADERSHIP PROGRAM

DR. ROBERT L. McKEAGE, Director

Leadership, the process of persuasion or example by which the members of a group are persuaded to pursue the group's objectives, is the focus of many new programs in education. The Business Leadership Program in the University's Kania School of Management provides selected students with an opportunity to perfect their talents for business leadership. The program includes special sections of key business courses taught from the leadership perspective, leadership seminars, a mentor/internship program, and an independent leadership project.

The key courses are taught with a special emphasis on business leadership by faculty chosen for their exceptional teaching and their interest in the leadership concept. The leadership seminars will help the students assess and perfect their talents for leadership and will put them into contact with many business leaders. Noteworthy among the opportunities are the internships (where the students are placed with business leaders who serve as mentors) and the projects developed and executed by the students to demonstrate their leadership skills. The program will culminate in the students' preparing portfolios on the essence of leadership, as derived from participation in the program, and defending their concepts of leadership before a faculty board.

This highly selective program accepts 15 sophomores each spring to begin the two-year curriculum the following fall. Applicants will be selected on the basis of the following criteria:

Leadership experience and/or potential; drawing from the student's record in high school, college, work history, clubs and activities.

Student's self-assessment and motivation in applying—how and why this program relates to the student's long-term goals.

Interests and hobbies.

Recommendations of teachers, others.

3.3 grade-point average (ordinarily); a minimum of a 3.5 grade-point average will be needed for graduation with honors in the program

SCHEDULE

	Fall		Spring	
Junior Year:	BLDR 351	Prin. of Management I	BLDR 355	Business Ethics
	BLDR 385	Business Leadership Seminar #1	BLDR 386	Business Leadership Seminar # 2
Senior Year	BLDR 455	Policy & Planning	BLDR 484	Work as Vocation
	BLDR 485	Business Leadership Seminar #3	BLDR 486	Business Leadership Seminar # 4 Senior Project

Although three of the four following courses are required of all business students, sections designated by (BLDR) are restricted to students in the Business Leadership Program.

BLDR 351
Principles of Management 3 credits
This course covers the key aspects of the management process for decision-making. The focus is the organizational setting in which business leadership is exercised.

BLDR 355
Business Ethics 3 credits
The individual and social ethics of the major areas of decision-making in business from a leadership perspective.

BLDR 455
Policy and Planning 3 credits
This is the capstone course for all business majors. Concepts and skills developed in the functional areas of accounting, finance, management, marketing and production/ operations are integrated and applied to the top-level management of an organization. Topics include analyzing organizational environment, setting missions and objectives, developing strategies and plans. allocating resources, and designing organizational structures, reward, and control systems. Special emphasis will be given to the role of executive leadership and values in the articulation of a corporate vision and culture, and in the choice of growth and competitive strategies. Intended as a case- and project-oriented course.

BLDR 484
Work as Vocation 3 credits
This final course in the BLDR sequence provides students with an opportunity to discover their professional "calling." This course is intended to help the graduating students make the transition from the classroom to the "real world," and to integrate the values they inculcated at the University into their work experience. They will examine their strengths, weaknesses, and interests to develop career plans and strategies.

The following are one-credit seminars.

BLDR 385 Self Assessment
Business Leadership Seminar #1 1 credit
Focus is on identifying the characteristics of leadership, self-assessment of personal strengths and weaknesses, and preparation of plan for self-development.

BLDR 386 Empowerment
Business Leadership Seminar #2 1 credit
Focus is on identifying the tasks of the leader and "enabling or empowering" people to achieve the organization's goals

BLDR 485 Mentorship
Business Leadership Seminar #3 1 credit
Student is placed in an organizational setting as a leadership intern to study the leadership of the organization.

BLDR 486 Senior Project
Business Leadership Seminar #4 1 credit
Student proposes, develops and executes a project evidencing a high degree of leadership skills and activity.

OTHER INTERDISCIPLINARY PROGRAMS

CATHOLIC STUDIES PROGRAM

DR. KATHY DWYER, Director

The Catholic Studies Program seeks to provide every student with the opportunity to engage the Catholic tradition in a deeper and broader way than the typical course of studies can provide. Accordingly, this program casts a wide net over what the Catholic tradition and heritage are and how they interface with human endeavor. Catholic Studies is a specialization built around a multi-disciplinary core that provides a systematic way of integrating the many facets of Catholic tradition with various academic disciplines. Because Catholic tradition is integrally linked to virtually every subject, it can provide a natural integrative coherence for nearly all majors and areas of studies. Thus the CSP provides a good means of organizing many general-education requirements into a unified concentration; it is an attractive academic program for rounding out a student's Catholic higher education.

The Catholic Studies Program consists of both inter- and uni-disciplinary courses which provide the opportunity to study the Catholic heritage in the ancient and the contemporary Church alike, and give access to the rich forms in which it has been expressed in literature, art, architecture, music, history, philosophy, science, etc. Catholic Studies welcomes all interested students whether or not they are Catholic. It is compatible with all majors. Ideally, students will enter in their freshman year, but it is possible for students to enter in their sophomore year. Courses in the program will meet either general-education, major, minor or cognate requirements. All non-CSP students are welcome in any course(s) in the program, but CSP students are given enrollment preference. Honors tutorials are encouraged. SJLA students are welcome.

All courses taught in the Catholic Studies Program will seek to promote appreciation of the Catholic tradition by being faithful to the Church's apostolic teaching. Courses will also encourage students 1. To integrate faith and academics; 2. To study the Catholic Tradition in an intellectually rigorous way; 3. To assess human intellectual activity and experience in the light of the Catholic faith; and 4. To examine the experience of Catholics in history, politics, various social groups, philosophical and religious movements, and/or science and technology.

The concentration consists of 21 credits: six are required; the other 15 are electives. T/RS 184C must be taken; one semester of Christian Classics is also required. Students may build their studies on their majors and interests. Students are invited to petition for readers that meet program standards. Students may likewise seek permission for courses not cross-listed to count for credit, provided they are eligible to do significant Catholic Studies work in them.

CATHOLIC STUDIES ELECTIVES: **Students will choose five courses from a list that may be obtained from the Director, and which is also available from the Registrar's office.**

Required courses

T/RS 184C Dr. S. Mathews
(P,W)Inside the Catholic Tradition 3 credits This introduction to Catholic Tradition will study its scope, depth, and on-going development, reception, and characteristics. Topics covered include Faith and Revelation, the intercommunion of Scripture and Tradition, the role of Magisterium, and the development of doctrine. Selected readings are taken from important conciliar texts and theologians.

INTD 201C-202C Staff
(P,W)Christian Classics I-II 6 credits Each semester of this CSP core course provides a structured opportunity for reading in common some of the major Christian works of literature and spirituality with which every educated Catholic should be familiar. Important Catholic books and significant works of some great men and women who have shaped Christian thought and life will be read and discussed.

ENVIRONMENTAL STUDIES CONCENTRATION

DR. LEONARD W. CHAMPNEY, Political Science Department
PROFESSOR JOHN R. KALAFUT, Physics and Electrical Engineering Department
DR. EDWARD M. SCAHILL, Economics/Finance Department
Program Co-Directors

The Environmental Studies Concentration introduces students to the scientific, economic, legal, political and philosophical dimensions of environmental issues, both within the United States and globally. The concentration is open to students from any major and may be of particular interest to students planning careers in government, law or business.

Courses for the Environmental Studies Concentration are drawn from eight departments in The College of Arts and Sciences and The Kania School of Management. Many of these courses may also be used for general education requirements. To enroll, students should consult one of the co-directors of the concentration. The concentration consists of eight courses:

PHYS 106	(E) Energy and the Environment
NSCI 201	(E) Science and the Human Environment
CHEM 202	(E) Global Change
ECO 103	(S) Economics of Environmental Issues
PS 230	(S) Environmental Policy
MGT 210	Business and the Environment
T/RS 316	(P,W) God and the Earth
PHIL 213	(P) Environmental Ethics

In addition, MATH 201, Algebra and Environmental Issues, is recommended. This course fulfills the quantative reasoning requirement in the general education curriculum, and is also a writing intensive course.

Natural Science majors who wish to pursue the Environmental Studies Concentration may complete the three natural science courses using any combination of the natural science courses listed above and/or the following courses:

CHEM 340	Environmental Chemistry
CHEM 342	Environmental Toxicology
CHEM 344	Environmental Geochemistry
BIOL 273	Marine Biology
BIOL 371	Ecology
BIOL 471	Applied Ecology
BIOL 473	Estuarine Ecology

HUMAN DEVELOPMENT

DR. JAMES P. BUCHANAN, Director

This program offers all students, especially those majoring in the behavioral and social sciences, the opportunity to develop a multidisciplinary focus in human development. The academic aims of the concentration are to provide an understanding of: 1. Both normal and exceptional development of humans as biological and psychological organisms; 2. The relationship between individuals and family/social environment; and 3. The means to enhance human development, including a field experience in a human-development agency.

The 30-credit Human Development concentration is administered by an interdisciplinary board of faculty from the Psychology, Sociology, and Human Resources departments. Students interested in careers and graduate programs in human development should contact the director for more information on course choice and on integrating the concentration with various majors. Students who complete this concentration will have it noted on their transcripts. The Human Development concentration requires the following:

1. Childhood & Adolescence (PSYC 221)
2. Adulthood & Aging (PSYC 222) or Introduction to Gerontology (GERO 110)
3. Abnormal Psychology (PSYC 225)
4. Case Management and Interviewing (HS 241)
5. Clinical Psychology (PSYC 360) or Counseling Theories (HS 242) or Introduction to Social Work (SOC 115)
6. Anatomy and Physiology (BIO 201) or ABC's of Genetics (BIO 202) or Behavioral Neuroscience (PSYC 231)
7. Three of the following courses with at least one course from the cultural-diversity group of: Cultural Anthropology (SOC 234), American Minority Groups (SOC 224), Marriage and the Family (SOC 210), Exceptional Child (HD 335), Family Development (HD 224), Multiculturalism in Human Services (HS 333), Psychology of Women (PSYC 237), or Juvenile Delinquency (S/CJ 214), and at least one course from the applied skills group of: Educational Psychology (EDUC 222), Early Childhood Education (EDUC 140), Child Welfare (SOC 118), Group Dynamics (HS 341), Psychiatric Rehabilitation (HS 323), Marital and Family Therapy (HD 234), Marital and Family Counseling (HS 334), or Behavior Modification (PSYC 284).
8. Field Experience in Clinical Psychology (PSYC 480) or Internship in Human Services (HS 380) or Internship in Social Work (SOC 480)

HD 224 Dr. Buchanan
Family Development 3 credits
(Prerequisite: PSYC 110) This course will explore the reciprocal interactions among children and parents as related to the development of all individuals in the family. Topics covered include the roles of family members, parenthood and marriage, parenting at specific developmental stages, families with single parents, families with exceptional children, and child abuse.

HD 234 Dr. Norcross
Marital and Family Therapy 3 credits
(Prerequisite: PSYC 110; recommended: Psych 225) An introduction to the theory, research, and practice of couples-counseling and family therapy. Topics include family dysfunctions, assessment methods, treatment approaches, innovative techniques, and research findings. (Also listed as HS 334.)

HD 335 Staff
Exceptional Child 3 credits
(Prerequisites: PSYC 110, PSYC 225) This course will consider atypical social, emotional, and mental development during childhood and adolescence. Topics include mental retardation, intellectual giftedness, learning disabilities, psychopathology of childhood and adolescence, and conduct disorders.

ITALIAN STUDIES CONCENTRATION

DR. VIRGINIA A. PICCHIETTI, Director; DR. JOSEPHINE M. DUNN, Co-Director

The Italian Studies Concentration is designed to advance students' understanding of diverse aspects of Italian culture and society. The concentration is open to all majors and consists of both interdisciplinary and single-discipline courses drawn from various academic departments at the University. It encourages both breadth and depth in the study of Italian culture and society; its goal is to cultivate a broadly-based knowledge of Italian civilization and its contributions to the specific fields comprising the concentration. At the same time, courses in the concentration will fulfill general-education requirements with an emphasis on cultural diversity and on a writing-intensive curriculum.

The curriculum is designed to accomplish the following: provide a focused study of Italian culture and society; develop oral and written skills; and develop practical skills applicable to trips to Italy and in career fields. The concentration requires the successful completion of seven courses, three of which are required courses and four of which are to be chosen from an approved list of electives. Students will be required to complete successfully two courses of Italian language as well as the Italian Studies Seminar. Students will enter the language level they can master (determined in consultation with the director and the language department), and will fulfill the language requirement by successfully completing two of the approved language courses.

The following are required and elective courses that make up the Concentration:

Italian studies required courses: ***Students will choose two language courses (at appropriate level) and seminar.***

ITAL 101-102	Elementary Italian
ITAL 211-212	Intermediate Italian
ITAL 311-312	Advanced Italian Composition and Conversation
	Italian Studies Seminar (a specific topics course whose content varies according to the interests of students and faculty. Offered every two years.)

Italian studies Elective courses: ***Students will choose four.***

ENGL 431	Dante's Divine Comedy	ARTH 218	The Age of Rembrandt
ITAL 207	Italian Women Writers	ARTH 384	Special Topics in Art History (if applicable)
ITAL 208	Envisioning Italy from Novel to Film: The Case of Neorealism	MUS 217	Opera
ITAL 209	Italian Cinema: From Origins to Present	MUS 284	Special Topics in Music History (if applicable)
ARTH 214	Renaissance Art and Architecture: 1250-1500	HIST 240	Modern Italy
ARTH 216	Michelangelo and His World	HIST 323	The Renaissance
ARTH 217	Leonardo (Da Vinci)	PHIL 221	Medieval Philosophy
		PHIL 222	Modern Philosophy I
		NSCI 103	The Ascent of Man

LATIN AMERICAN STUDIES CONCENTRATION

DR. ROBERT A. PARSONS, Director

The Latin-American Studies Concentration is designed to advance students' awareness and understanding of Latin America. It seeks to provide both broad, general knowledge of the entire Latin American region, and in-depth knowledge of specific countries, regional groupings of countries, and cultures both dominant and marginal. The concentration is open to all majors and it consists of courses from a variety of disciplines with a primary focus on Latin America. These courses fulfill general education requirements in the Humanities area (Foreign Languages and History), the Social Sciences area (Political Science), and some of them also carry cultural diversity and writing intensive credit. Supporting courses may fulfill general education requirements in other areas as well.

The Latin American Studies Concentration is an attractive complement to many existing majors. Related fields include foreign languages, international business, international language/business, international studies, history, political science, theology, philosophy and sociology. Some related professions or careers include law, government, non-governmental organizations, non-profit organizations, banking and teaching.

Core and supporting courses are listed below. Others will be added as they are developed.

Language (4.5–6 credits)
SPAN 311-312* or PORT 210**

History (6 credits)
HIST 125-126 Latin American History
HIST 213 Gender & Family in Latin America
HIST 215 Church & Society in Latin America
HIST 327 The African Experience in Latin America

Politics (6 credits)
PS 219 Survey of Latin American Politics
PS 3XX Topical or country-specific courses

Supporting Courses (6 credits)
SPAN 320 Introduction to Literature
SPAN 314 Topics in L.A. Culture & Civ.
SPAN 331 Spanish American Literature
SPAN/PS 295 Contemporary Mexican Culture and Language
T/RS XXX Liberation Theologies
PHIL XXX Latin American Thought

*At this level or higher; intermediate Spanish (211-212) is a prerequisite for 311
**Elementary Portuguese is taught intensively, only 4.5 credits are required.

PEACE AND JUSTICE STUDIES PROGRAM

PROF. STEPHEN CASEY, Coordinator

The Synod of Bishops of the Roman Catholic Church (1971) reported that "actions on behalf of justice and participation in the transformation of the world fully appear to us as a constitutive dimension of the preaching of the Gospel...". The 32nd General Congregation of the Society of Jesus (1974-5) established a pedagogical norm for its own institutions of higher education when it determined that the practice of faith was inextricably linked to the promotion of justice. In this vein the University's Peace & Justice Program was instituted to bring academic studies, including classes, community service and interdisciplinary research, into the process of building a more just and thus more peaceful society.

The Peace and Justice Concentration will be an attractive complement to the academic programs of students planning careers in law, international relations, human services, ministry and teaching - to name only the most obvious. However, any students who have a personal interest in the problems of peace and justice, regardless of their career goals, can benefit from its multi-disciplinary concentration of courses. It is open to majors from all the undergraduate schools of the University. Eight courses (24 credits) must be taken by students in order to have "Peace and Justice Concentration" added to their transcript. Courses may be taken as part of the cognate requirement (with permission of the chairperson of the major) or as part of the general-education requirements.

The following courses will provide students with the opportunities to reflect critically on the social, economic, psychological, political and structural issues impeding the establishing of a just & peaceful society:

A. Requirements in Theology (any two of the following):

Church and Contemporary Social Issues (T/RS 326)
Faith and Justice (T/RS 236)
God and the Earth (T/RS 316)
Jesus and the Moral Life (T/RS 338)
John Paul II and Catholic Social Thought (T/RS 232)
Politics: A Christian Perspective (T/RS 237)
Prophets & Profits (T/RS 236)
Social Ethics (T/RS 231)
Twentieth-Century Peacemakers (T/RS 234)
Wealth and Poverty in the Biblical Tradition (T/RS 328)

B. Electives (any five courses listed below can be counted; others may be included with approval from the program coordinator):

Responsibility in Communication (COMM 220)
Political Communication (COMM 311)
Colonial & Post-Colonial Fiction (ENLT 348)
Novels by Women (ENLT 226)
Race in Anglo-American Culture 1600-1860 (ENLT 228)
Cultural Geography (GEOG 217)
The Third World (HIST 211)
Race in American History (HIST 216)
Ethnic and Racial Minorities in N. E. PA(HIST 224)
Energy and the Environment (PHYS 106)
Environmental Ethics (PHIL 213)
Feminism: Theory & Practice (PHIL 218)
Literature of American Minorities (LIT 207)
Political Philosophy (PHIL 227)
Philosophy of Culture (PHIL 410)
Women, Authority and Power (PS 227)
Social Psychology (PSYCH 220)
Law and Society (S/CJ 210)
Community Organization (SOC 116)
American Minority Groups (SOC 224)
Organizational Social Responsibility (MGT 473)
Urban and Regional Economics (ECO 462)
Development Economics (ECO 465)
Multiculturalism in Human Services (HS 333)

C. Integrative Capstone Course: (required in Jr./Sr. year)

T/JP 310 Toward a Just and Peaceful World 3 credits

This course will reflect on the various issues and problems raised by peace and justice study. It will consider the relationship of religion, moral philosophy and the social/political concerns embraced in the quest for a human world order. Faculty from several disciplines will make presentations. Each student will write a paper from the perspective of his/her major area of concentration.

WOMEN'S STUDIES CONCENTRATION

DR. JEAN HARRIS, Director

The Women's Studies Concentration consists of courses which examine women's experiences and the ways gender-related issues affect human lives and cultures. Faculty and students analyze the ways gender roles and images, and assumptions about gender, are reflected in art, business, literature, law, philosophy, public policy, religion, language, history, the sciences, and their own lives. At the same time many Women's Studies courses will address issues of race, class, ethnicity, and age which intersect with gender-related issues.

Women's Studies courses focus on women's experiences in history, society, and culture, and examine their reactions to such experiences; examine institutional structure/modes of authority/analysis of power, especially considering their implications for women; and incorporate one or more feminist analyses/scholarly works (recognizing that there are multiple, and even conflicting, feminist perspectives).

Women's Studies seek to promote critical thinking, intellectual growth, and a self-awareness useful to all students. It is an attractive academic supplement to the programs of students planning careers in government, law, business, human services, ministry, and teaching—to name but a few.

Courses for the Women's Studies Concentration are drawn from all the colleges at the university and are open to students in all majors. (To enroll, students must see the Director of Women's Studies.) The concentration consists of six courses including one required core course. The student may take PHIL 218 or SOC 215 as the required core course. The remaining five courses are chosen across several departments by the student from cross-listed courses approved by the Women's Studies Committee. Many of the cross-listed Women's Studies courses also fulfill major, minor, cognate, and/or general-education requirements.

Students may seek permission from the Women's Studies Committee to take no more than one reader for Women's Studies credit, subject to the usual rules governing readers. Students may also petition to substitute no more than one course not cross-listed with Women's Studies, if the course has sufficient Women's Studies content and the student is able to do a signficant project/assignment on a Women's Studies topic.

WOMEN'S STUDIES COURSES

ARTH 210 Women in the Visual Arts (CA,D)
COMM 229 Gender and Communication (D)
ENLT 225 Writing Women (CL,D,W)
ENLT 227 Frankenstein's Forebears (CL,D,W)
ENLT 226 Novels by Women (CL,D)
ENLT 228 Race in Anglo-American Culture 1600-1860 (CL,D,W)
*FREN 430 French Women Writers
HIST 213 Gender and Family in Latin America (CH,D)
HIST 238 History of American Women I (CH,D)
HIST 239 History of American Women II (CH,D)
ITAL 207 Italian Women's Writing in Translation (CL,D,W)
HS 337 Counseling Girls and Women (D)
LIT 207 Literature of American Minorities (CL,D,W)
NURS 111 Women's Health (D)
PHIL 218 Feminism: Theory and Practice (D)
PHIL 326 Advanced Topics in Feminist Theory (P,D)
PHIL 331 Feminist Philosophy of Science (P)
PS 216 Women's Rights and Status (D)
PS 227 Women, Authority and Power (D)
*SPAN 430 Hispanic Women Writers
SOC 215 Feminisim and Social Change
SOC 217 Family Issues and Social Policies (D)
T/RS 315 Women in Christianity (P,D)
T/RS 319 Women's Spiritual/ Autobiographical Writings (P,D)
WOMN 380-81 Women's Studies Internship
WOMN 429 Special Topics

*Taught in the original language
Some of the listed courses have prerequisites; please consult departmental description

WOMN 380-81
Women's Studies Internship
(prerequisites PHIL 218, or SOC 215, or permission of Women's Studies Committee)
Designed to broaden the educational experience of students by providing practical experience for them in various non-profit and other organizations that deal primarily with women's issues or women clients. Students will ordinarily be expected to write a reflection paper. Supervision by faculty members and agency supervisor.

INTERNSHIP PROGRAMS

The University's commitment to internships and other types of career-related learning experiences as an integral part of the educational process is strong and growing. Since the fall of 1995, over 1,500 students have enrolled in for-credit internships related to their majors or vocational goals.

The University of Scranton offers two kinds of career-related learning experiences – for-credit internships and non-credit, career-related work experiences. Internships for credit give students opportunity to reflect upon, analyze, and critique their experiences in ways that demonstrate their ability to integrate what they have learned in the classroom with what they are learning in the field. For-credit internships require that students be supervised by a faculty member and an on-site supervisor, and that they develop a set of clearly defined learning objectives, internship responsibilities, and an assessment plan. Non-credit, career-related work experiences assist students in gaining work experience that complements their academic preparation. They are less structured and do not necessarily relate to specific course work.

For-credit internships are available to students in many majors. For specific information on such internships, students should contact their academic advisors. Students wishing to participate in the non-credit Career Experience Program should contact the Career Development and Placement Center (941-7640) to schedule an appointment with one of the counselors.

FACULTY/STUDENT RESEARCH PROGRAM

The Faculty/Student Research Program (FSRP) gives students an opportunity to be involved in faculty research. Students in all fields (e.g. natural sciences, humanities, social sciences, business) can participate. They engage in a variety of activities ranging from relatively routine tasks to more sophisticated research.

There is no cost for the FSRP; the program is open to all students in good academic standing including incoming freshmen. While students do not receive academic credit, they do receive transcript recognition.

To participate in the program, students must identify a faculty sponsor with whom they want to work. This can be done either by talking to individual faculty members directly about their research interests or by consulting the FSRP Directory. The Directory includes information on research projects and any student prerequisites. When a student and faculty member agree to work together, they complete a learning contract that outlines the nature of the research, the tasks involved and the hours to be worked.

For further information about this program, contact the Office of Research Services, Room 221, The Estate, (570) 941-6190.

STUDENT/FACULTY TEACHING MENTORSHIP PROGRAM

The Student/Faculty Teaching Mentorship Program(SFTMP) offers advanced students the opportunity to assist and be mentored by faculty in the teaching of selected courses. Together, they will craft the teaching/tutoring experiences that best fit the pedagogical requirements of the relevant course.

There is no fee assessed for this non-credit experience. While students do not receive academic credit or a grade, they do receive transcript recognition. The program is open to all undergraduate and graduate students in good academic standing.

For more information about SFTMP, please contact the Office of Instructional Development, OHA 201, (570) 941-6129.

PRE-LAW PROGRAM

The University is justly proud of its tradition in providing students seeking careers in the law with a solid preparation for the demands of legal study and practice, based on an undergraduate curriculum rooted in liberal education. Graduates of the University in all regions of the nation have achieved distinction in virtually every area of the law, including such offices as local, state and federal judges. In Northeastern Pennsylvania, nearly half of the members of the legal community hold undergraduate degrees from The University of Scranton.

The clearest measure of the strength of the University's Pre-Law Program is the remarkable success its graduates have had in winning admittance to law schools throughout the country. Recent graduates have been admitted to many prestigious law schools, including Cornell, Georgetown, Harvard, and the University of Pennsylvania, American University, Boston College, Catholic University, Dickinson, Fordham, Notre Dame, Pittsburgh, Rutgers, Seton Hall, Temple, Villanova, and Widener.

Pre-Law Curriculum. No specific undergraduate major is required for admission to law school; the American Bar Association's statement on Preparation for Legal Education does not recommend any particular group of either majors or individual courses, noting that "the law is too multifaceted, and the human mind too adaptable, to permit such a linear approach to preparing for law school or the practice of law."

The ABA statement, however, does describe certain skills and values which are essential to success in law school and to competent practice. These are: **Analytic and Problem Solving Skills**, involving critical thinking and the ability to structure and evaluate arguments for and against propositions; **Critical Reading Abilities**, derived from substantial experience in the close reading and critical analysis of complex texts; **Writing Skills**, developed through rigorous practice in preparing and revising original pieces of substantial length; **Oral Communication and Listening Abilities**, based on experience in giving and evaluating formal presentations; **Research and Time Management Skills**, involving the ability to plan a research strategy, to undertake substantial library work, and to organize large amounts of information within a fixed period of time; and, not least of all, a **Commitment to Serving Others and Promoting Justice**, based on significant experience in service projects while an undergraduate.

The skills noted above can be acquired by students majoring or minoring in any discipline that involves intensive reading and extensive writing such as, for example, English, history or political science. At the same time, students who have majored in other areas, including philosophy, languages, management, any of the social sciences, as well as the natural sciences, have enjoyed success in the study and practice of law. Ultimately, the best preparation for law school comes from taking challenging courses from demanding professors.

In addition to these skills and values, the ABA has identified several more specific areas of knowledge that pre-law students should acquire as undergraduates. The University's Curriculum 2000 provides a framework whereby all can be acquired through the General Education requirements applicable to all majors:

- a broad understanding of American history (HIST 110-111)
- a fundamental understanding of political thought and the American political system (PS 130-131)
- a basic understanding of ethical theory (PHIL 210)
- a grounding in economics, especially microeconomic theory (ECON 153)
- an understanding of basic pre-calculus mathematics (MATH 106 or equivalent)
- a basic understanding of human behavior and social interaction (PSYC 110 or SOC 110)
- an understanding of diverse cultures within and beyond the United States (the six-credit cultural-diversity GE requirement)

In addition to the courses listed above which satisfy general-education requirements, certain departments offer courses that can be of particular value to pre-law students and which, depending upon their major, can be taken as electives within either the major or cognate. Such courses include HIST 336 (History of American Law), HIST 337 (British Constitutional and Legal History), PS 311-312 (American Constitutional Law), and WRTG 212 (Writing for the Law).

Pre-Law Internships. Interested students with a grade-point average above 3.00 at the time of application may, with the approval of the appropriate dean, receive academic credit for internships served in the offices of either private law firms or various legal agencies such as the district attorney, public defender, or district magistrate. Prior approval of the planned internship is necessary. A minimum of 150 hours work is required for internship credit in PS 280. Application forms for these internships are available from the Registrar's Office.

Pre-Law Advisory Council. Continuing advice on course selection, career planning and the law school-application process is provided by a pre-law advisory council headed by Dr. Frank X.J. Homer as Director of Law School Placement. He is assisted by Ms. Constance E. McDonnell, Associate Director of Career Services, who aids law school applicants in assembling their credential files and coordinates the annual on-campus Law Fair; and Dr. Robert F. Hueston who serves as moderator of the student Pre-Law Society which provides a forum for speakers from the legal profession and sponsors trips to visit law schools, along with faculty members from the departments of Criminal Justice, English, History, Philosophy and Political Science in The College of Arts and Sciences as well as faculty representatives from both The Panuska College of Professional Studies and The Kania School of Management.

Law-School Admission Test. Along with a student's undergraduate academic record, the LSAT score is a critical factor in the law-school-admission process. Ordinarily, pre-law students take the LSAT at the end of the junior year or early in the senior year. As a means of assisting University students to score up to their fullest potential on the LSAT, on-campus LSAT workshops are offered at least twice each year. These provide University students with an alternative to costly commercial test-preparation services.

PRE-MEDICAL PROGRAM

The success of the University's Pre-Medical Program has been outstanding. Since 1980, the University has placed an average of over 50 students per year into American schools of medicine, dentistry, optometry, podiatry and veterinary medicine, often in the most prestigious schools in the country.

The University of Scranton offers its pre-medical students unique opportunities in anticipation of changes in health-care delivery for the twenty-first century. They include a special exposure to primary-care medicine (the practice of family physicians, general internists, and general pediatricians), predicted to be the area of greatest growth in medicine. Students have an opportunity to participate in an undergraduate primary-care externship through the Scranton-Temple Residency Program. In this program, students accompany physicians at Scranton Mercy and Moses Taylor Hospitals to gain exposure to clinical settings in primary-care medicine. Students gain transcript recognition for participation in this externship, as well as a clear view of the profession they seek to enter.

A special opportunity is offered to eight students each year through the Medical Scholars Program, a cooperative program at The University of Scranton and Temple University School of Medicine. Through this program, highly qualified high school seniors are offered early assurance, contingency admission to Temple University School of Medicine.

Moreover, The University of Scranton is one of only six undergraduate institutions participating in the Jefferson Medical College Physician Shortage Area Program (PSAP). This program is designed to recruit and educate medical students who intend to enter family medicine and practice in physician-shortage areas in Pennsylvania. Finally, University of Scranton students are encouraged to participate in programs at the Center for Primary Care at the Penn State College of Medicine, Hershey.

The Pre-Medical Program is supported by a network of hundreds of medical alumni and by an active Medical Alumni Council. The Medical Alumni Council has compiled a directory of physicians who have agreed to serve as resources for information or internship opportunities for University of Scranton students. It also sponsors on-campus programs to which undergraduate students are invited.

Pre-Medical Undergraduate Curricula. Many undergraduate students who intend to apply to health-professions schools choose Biology or Biochemistry as their major. However, students may choose any major, provided that they meet the requirements for entrance to medical, dental, or other health-professions schools.

For students at The University of Scranton, the *minimum* requirements are listed below. All courses must be taken with their corresponding labs.

Biology 141 and 142, General Biology
Chemistry 232 and 233, Organic Chemistry
Chemistry 112 and 113, General and Analytical Chemistry
Physics 120 and 121, General Physics

Virtually all medical schools require a year of English, and many require a semester or a year of mathematics.

Many medical schools recommend that students demonstrate a wide range of interests in their choice both of courses and of extra-curricular activities. Volunteer work is strongly recommended by the admissions committees of most health-professions schools, as is course work in ethics, particularly in PHIL 212, Medical Ethics; PHIL 316, American Perspectives on Health Care Ethics; and/or T/RS 330, Biomedical Ethics.

Some medical and dental schools also have specific prerequisites for English, mathematics, or other courses, as listed in *Medical School Admission Requirements*, or *Admission Requirements of U.S. and Canadian Dental Schools*. Copies of these publications are available in the office of Dr. Mary Engel, Director of Medical School Placement. They are also available online and may be accessed through the Health Professions Organization web site at http://academic.scranton.edu/organization/premed/

The Association of American Medical Colleges recommends that undergraduate students planning to apply to medical school acquire a strong background in the natural sciences, so students should consider courses in biology, chemistry, physics and mathematics beyond the minimum requirements. Students should develop strong oral and written communication skills, and they should complete rigorous courses in the humanities and social sciences. Honors courses and programs, independent study, and/or undergraduate research are also encouraged.

The University offers all applicants to health-professions schools the option of a formal applicant evaluation by the Health Professions Evaluation Committee (HPEC). This committee consists of sixteen faculty and administrators representing a wide range of academic disciplines. It is directed by Dr. Mary Engel, University Director of Fellowship Programs and Director of Medical School Placement, who also advises the Health Professions Organization.

Applicants are evaluated on academic record, volunteer and community service activities, extracurricular activities, and demonstrated motivation toward their chosen careers. Students submit documents and request faculty letters of evaluation and are interviewed by two members of HPEC. Through the HPEC interview, students have an opportunity to develop their interviewing skills and receive feedback on their application materials and interviewing performance. The HPEC evaluation package sent to health professions schools provides a comprehensive narrative which describes in depth an applicant's qualifications for advanced study and a career in the health professions.

The University also makes available to students a wide variety of resources in the Health Professions Lending Library; information about materials which students may borrow is available from the Director of Medical School Placement.

AEROSPACE STUDIES (Air Force Reserve Officer Training Corps)

LT. COL. DONNA LYNN SMITH, Chairperson

The Air Force Reserve Officer Training Corps (AFROTC) program at Wilkes University permits students attending The University of Scranton to earn commissions as officers in the United States Air Force while pursuing a University degree. Students may enroll in either the four-year or two-year programs. Aerospace Studies courses are held on the campuses of Wilkes University, Bloomsburg University, and King's College.

The four-year program permits students to enter the AFROTC program in freshman or sophomore year. (Students with three years remaining until graduation may enroll concurrently in the freshman and sophomore Aerospace Studies courses and can complete the four-year program in three years.)

The two-year program is available for students (including graduate students) who have at least two years remaining until graduation. Students interested in enrolling in the two-year program must apply as early as possible in their sophomore or junior year. Students should call 1-800-945-5378, ext. 4860, for more information.

General Military Course (Four-Year Program Only). The first two years of the four-year program constitute the General Military Course (GMC). GMC courses are open to any University student. Students enrolling in these courses do not incur any military service obligation. (Exception: Air Force scholarship recipients incur a commitment at the beginning of their sophomore year.) The GMC curriculum consists of four one-credit Aerospace Studies courses, plus a non-credit leadership laboratory each semester, which introduces students to U.S. Air Force history and environment, customs, courtesies, drill and ceremonies, and leadership skills.

Professional Officer Course (Two- and Four-Year Programs.) The final two years of the four-year program comprise the Professional Officer Course (POC). It consists of four three-

credit Aerospace Studies courses, plus a non-credit leadership laboratory each semester. Cadets earn a $250-$400 per-month, tax-free subsistence allowance during the academic year and incur a military obligation. To be accepted into the POC, students must pass a physical examination and an officer-qualification test and must meet certain academic standards. Four-year cadets must also complete a four-week field-training program; two-year applicants must complete a five-week field training program, both of which are administered the summer before POC entry. In addition, all POC cadets must complete a course in mathematical reasoning prior to being commissioned.

Uniforms. All uniforms, equipment, and textbooks required for AFROTC are supplied by the U.S. Air Force. All cadets are required to pay a nominal initial deposit which will be refunded when the cadet returns all uniform items in satisfactory condition at the completion of (or withdrawal from) the AFROTC program.

Scholarships. The U.S. Air Force offers many 1-to-5-year full and partial scholarships for which qualified students may compete, if they enroll in AFROTC. All scholarship awards are based on individual merit, regardless of financial need, with most scholarship recipients determined by central selection boards. Scholarship-selection boards for students already in college are held each year. Since scholarship applicants must meet certain academic, physical-fitness and medical requirements to be considered by the scholarship boards, they should contact the Aerospace Studies department early to apply. All AFROTC scholarship recipients entering (or transferring to) The University of Scranton receive free room.

Commissioning. All students who satisfactorily complete the POC curriculum requirements are commissioned as second lieutenants in the U.S. Air Force, and will serve on active duty in a career specialty they have chosen, consistent with USAF needs.

For additional information, or if you have specific questions about the Air Force Reserve Officer Training Program, contact the Aerospace Studies Department, at 1-800-945-5378, extension 4860, or at http://wilkes1.wilkes.edu/~afrotc

SECOND DEGREES

Persons with good scholastic records and baccalaureate degrees from regionally accredited institutions, who wish to earn second baccalaureate degrees, must apply to Dexter Hanley College.

SUMMER SCHOOL

The University of Scranton annually offers a Summer School of two sessions to allow students to accelerate their degree programs or to make up courses that may not have been completed during the regular semesters.

SERVICE LEARNING

The Panuska College of Professional Studies, in keeping with the mission of this University, is committed to a program of service-learning, which provides a link between community service and academic study. Students learn and develop by participating in thoughtfully organized service that is conducted in and meets the needs of the community. Service-learning is integrated into and enhances students' academic curriculum by providing structured time for students to reflect on the service experience. The service experience is an effective strategy for achieving enrichment and introducing the student to the academic, social and civic needs of diverse groups of people. Through this program, students in The Panuska College of Professional Studies complete service-learning experiences as a requirement for graduation.

Outside the Classroom

Much of a student's education takes place outside the classroom. At The University of Scranton, some of the formal academic learning process takes place off campus in the various internship programs; on campus there are available traditional extracurricular activities. In many instances, these activities merit and receive academic credit. They also provide further means for creating a community of scholars and a culture of excellence.

STUDENT AFFAIRS

The University's Division of Student Affairs is committed to the integration of high-quality student learning with the development of the whole person. In addition, through resources, programs and collaborative efforts with the academic community as well as with all University divisions, it strives to form "men and women for others" in the Jesuit tradition, persons who are distinguished by a reflective and faith-filled vision for living that includes commitment to leadership and service in the world.

Efforts in the Division of Student Affairs are designed to help students develop their "potential into achievement" in the following areas: intellectual life, wellness, diversity, citizen-leadership, life planning, culture and commitment to growth.

The Division is organized into five basic areas: student affairs administration, multi-cultural affairs, student life (including commuter and off-campus affairs, student programming, student government, leadership, orientation and residence life), athletics (intercollegiate and recreational) and student development (counseling, student health, wellness, campus women's center and career services). Primary among these areas are multi-cultural affairs, student life, athletics and student development.

JUDICIAL AFFAIRS AND ASSESSMENT

While participating in the life of the University community, it is hoped that students will learn and develop within the Jesuit educational tradition. Consistent with this tradition, the University community expects students to lead examined lives supportive of the common good. Thus, it is important for students to comply with University behavioral expectations designed to promote respect for others and observance of the tenents of the University Community Standards Code.

In coordinating the review of student misconduct cases, the Judicial Affairs Office helps students understand their behavioral responsibilities as members of the University community and ensures that the rights of accusing and accused students are upheld within a fair-minded judicial system. Also, this office can assist students experiencing conflict with others by referring them to a peer mediator program.

The staff associated with the Judicial Affairs Office also assists the Division of Student Affairs in the creation, implementation, and evaluation of a comprehensive assessment program. This assessment program addresses issues of student growth and development, departmental functioning and operation, and student perceptions of divisional effectiveness.

MULTI-CULTURAL AFFAIRS

The University of Scranton is increasingly a learning community that mirrors the diversity of the Kingdom of God. Each individual in this community is encouraged to embrace the richness of life associated with other cultures and people of diverse backgrounds. Growth in this area centers on personal understanding and a comfort with one's own cultural identity and tolerance and support for those who are different. The Assistant to the Vice President for Student Affairs for multi-cultural affairs works closely with the administration, faculty, staff and students, especially the United Colors student organization, to create an atmosphere that is conducive to learning for students of color and that offers all students a chance to grow in their understanding of and appreciation for people from different racial and ethnic backgrounds.

STUDENT LIFE

This office complements the academic program of studies as part of The University's overall educational experience through development of, exposure to, and participation in social, cultural, intellectual, recreational and governance programs. It encourages such things as positive and realistic self-appraisal, intellectual development, making appropriate personal and occupational choices,

clarification of values, the ability to relate meaningfully with others, the capacity to engage in a personally satisfying and effective style of living, the capacity to appreciate cultural and ethnic differences, and the capacity to work independently and interdependently.

The Office of Student Life is located on the second floor of the Gunster Student Center and is open Monday through Friday from 8:30 a.m. to 4:30 p.m. (570-941-6233).

Student Government is an organization with the task of maintaining and improving all aspects of student life to provide a productive academic and social environment for the student body. Its familiar faces and widespread involvement give the campus life and energy. Its leadership consists of elected student officers.

Clubs and Organizations. The University of Scranton encourages students to participate in many active clubs and organizations provided through the Office of Student Life and Leadership. These clubs and organizations encourage students to become immersed in the campus community and their self-directed activities allow members to develop their leadership skills while meeting the goals of the club and the needs of its members.

STUDENT CLUBS

Accounting Club
Advertising Club
American College of Health Care
American Production Inventory
American Psychological Society Student Caucus
Association for Childhood Education International
Biology Club
Bowling Club
Business Club
Chemistry Club
College Democrats
College Republicans
Communications Club
Computer Science Club
Council for Exceptional Children
Criminal Justice Club
Drill Team/Color Guard
Enviromentally Concerned Organization
Habitat for Humanity
Health Administration Club
Health Administration Association
Health Professions Organization
Horticulture Club
Human Resources Association
Human Service Association
India Club
Institute of Electrical & Electronic Engineers
International Students Association
Irish Society
Long Term Care Association
Marketing Club
Men's Volleyball
Nursing Association
Philosophy Forum
Physical Therapy Club
Pre-Law Society
Political Affairs Society
Psychology Club
Public Relations Student Society
Rangers Club
Royal Battalion
Royal Dance Ensemble
Royal Riders
Royals Historical Society
Ski Club
Social Science Club
Society for Advancement of Management
Student Education Association
Student Occupational Therapy Club
Students for Life
The New Agenda
United Colors
University Singers
Veterans Club
Volunteer Community Outreach Efforts
Women's Business Honor Society
Women's Crew
Women's Rugby

A complete list of campus clubs and organizations is available on the student activities homepage on the web.

COMMUTER AND OFF-CAMPUS AFFAIRS

The University makes special efforts to insure that commuting students and those who live off campus have access to its academic and co-curricular programs and services through the Office of Commuter and Off-Campus Affairs and especially through the Commuter and Off-Campus Association (COCA).

Commuter and off-campus programming assists students who live apart from the immediate campus community with their pursuit of Jesuit educational ideals emphasizing tolerance and support for those who are different, living a healthy life, participation in cultural events of every kind and exploration of their talents and desires for growth.

JANE KOPAS WOMEN'S CENTER

The Jane Kopas Women's Center fosters a campus community in which women and men can live in a climate of mutual respect, understanding and equality, and where women are encouraged to reach their fullest potential. It provides a safe, comfortable and educational environment in which students, faculty, staff and members of the community can learn about the current and historical role of women in society and where they can explore issues of gender equality, diversity and social justice.

Both women and men are encouraged to attend the Center's co-curricular programs on gender and diversity issues and to use its resource center for courses, special projects or personal enrichment. Books, periodicals, videos, tapes, internet access, and informational pamphlets are available for use, and the Center is also a place to learn about internship possibilities and conferences.

The Jane Kopas Women's Center's central location on the ground level of Fitch Hall and its comfortable atmosphere make it a place to get away from the daily stress of college life. There is always a need for work-study students and volunteers to serve the campus community. Interested students can call (570) 941-6194 or visit the Center from 10:00 a.m. to 6:00 p.m. Monday through Friday.

CAREER SERVICES

Career Services helps students focus on career directions that are consistent with their unique talents, aspirations, and vision for living. Professional counselors can help students discover links between their personal traits and career options through individual counseling, workshops, and many other electronic and hard-copy resources available at the Career Services Office.

Students who are looking for related work experience while they are attending the University can benefit from the Career Experience Program and other internship-related services. As students near graduation they can receive training in resume and cover-letter writing and in interview and job-search technique. They are also able to participate in employer on-campus recruiting visits, employment fairs, and the annual Law School Fair.

The Career Services Office is located on the third floor of Elm Park Church and is open from 8:30 a.m. to 4:30 p.m. Monday through Friday (570-941-7640).

COUNSELING CENTER

Sometimes students have personal problems they may wish to discuss with a counselor. These may be related to the transition from high school to college or to decision-making regarding a variety of challenges that may occur for college students. These may also include such things as relationships, alcohol and other drug use, or family issues.

The Counseling Center is staffed by psychologists, certified counselors and a licensed social worker who are available to help students make the most they can out of their years at the University. Sometimes finding ways to talk about the stresses of life can make the difference between an average college experience and an exceptional one.

The Center, which is located in McGurrin Hall, second floor, is open from 8:30 a.m. to 4:30 p.m. Monday through Friday. Later evening sessions may be available by appointment, and emergency crisis consultation is available on a 24-hour basis from September through May while classes are in session by contacting Public Safety 941-7777 to reach the counselor on-call. For Counseling Center appointments, students can call (570) 941-7620 or stop by the Center.

INTERCOLLEGIATE ATHLETICS

The University is a Division III member of the National Collegiate Athletic Association (NCAA), the Middle Atlantic States Collegiate Athletic Conference (MAC), and Eastern College Athletic Conference (ECAC). The Athletics Office is located in the John Long Center and is open Monday through Friday from 8:30 a.m. to 4:30 p.m.

Men's Varsity Sports Roster
Baseball
Basketball
Cross Country
Golf
Ice Hockey
Lacrosse
Soccer
Swimming
Tennis
Wrestling

Women's Varsity Sports Roster
Basketball
Cross Country
Field Hockey
Lacrosse
Soccer
Softball
Swimming
Tennis
Volleyball

The University of Scranton varsity athletic program has enjoyed a tradition of success. In 2000, Joe Fent, a four-time conference champion, earned All-America honors for the second time, while the men's and women's basketball teams and the women's soccer teams participated in the NCAA Division III national championship tournaments. Other notable achievements include two NCAA titles and four Final Four appearances for men's basketball and an NCAA championship and seven Final Four berths for the women's team – the latest at Danbury, Connecticut, in 2000. The men's soccer team has a record four consecutive NCAA Final Four appearances.

In the Middle Atlantic Conference, Scranton has won 38 women's championships and 29 men's, for a combined total of 67 as of December 2001. The men's and women's soccer teams have won 19 MAC championships including a streak of seven straight from 1990 to 1996 for the women's team. In basketball, the men have won 15 conference titles, and the women's team has won 13.

The varsity program has produced many of the NCAA Division III's finest athletes, including 48 All-Americans. The women's basketball team has had 15 All-Americans since 1980, including Kelly Halpin in 1998, 1999 and 2000. Deanna Kyle (1985) and Shelley Parks (1987) were the National Players of the Year. Men's basketball has also had 13 All-Americans, with two in 1993. Men's soccer has produced 11 All-Americans, followed by women's soccer with ten, including Sara Suchoski, a feshman, who earned first team honors this past season..

The University's programs have produced 31 National Academic All-Americans since 1981. The University is a consistent leader in the Middle Atlantic Conference in the number of academic awards. During the 2000-2001 academic year, Nicole Bayman, a member of the women's soccer team, and Sarah Gazdalski, a member of the Lady Royals' women's swim team, were named first-team Academic All-Americans by the College Sports Information Directors of America; Joe Fent earned second-team honors. Bayman and Fent have also been awarded prestigious NCAA post-graduate scholarships.

RECREATIONAL SPORTS

Housed in the Byron Recreational Complex, located at the south end of campus, the Recreational Sports Department seeks to provide a comprehensive program of sports activities designed to appeal to the diverse needs and interests of the University community. Intramural leagues begin approximately the third week of each semester and include basket-

ball, volleyball, walleyball, flag football, racquetball, tennis, soccer, whiffleball, badminton, softball and ultimate frisbee. Special one-day events are held on weekends throughout the year and include skiing, snow tubing, golf, table tennis, beach volleyball, and hiking.

In addition to structured programs, the Byron Complex also offers many opportunities for individual recreation. Cardiovascular training equipment (treadmills, cross-trainers, steppers, rowers, bikes and a Nordic Track skier) are located on the second level in the Murray Royals Fitness Center and can be reserved 24 hours in advance. Aerobics classes are conducted on a weekly schedule and can be attended on a drop-in basis. The recreation complex also houses three multi-purpose courts, four racquetball courts, a six-lane swimming pool, a dance-aerobics room, weight room, saunas, and steam rooms. In addition to indoor facilities, there is an outdoor basketball court, turfed utility field, and sand volleyball court located directly behind the recreation complex. A variety of recreational equipment may be obtained in the recreation office with a valid Royal card. Whether students are looking for a competitive game of basketball, a high-impact aerobics class, or just a leisurely swim in the pool, the Recreational Sports Department offers them all of these opportunities.

The recreation center is open during regular semesters from 6:30 a.m. through midnight, Monday through Thursday, and Friday from 6:30 a.m. to 9:00 p.m., Saturday from noon to 9:00 p.m. and Sunday from noon to midnight (570-941-6203).

ORIENTATION

Orientation helps all new students, freshman and transfer, with their transition to life at the University. The program is the link between the admissions process and students' arrival at the University for their first semester. The emphasis is on scheduling, academic and social integration and providing a natural connection to the strong sense of community at the University.

RESIDENCE LIFE

The Residence Life system includes 13 freshman and 19 upper-class residences that provide secure and comfortable living spaces for study and personal development. Residence freshmen are assigned with their classmates to residence halls where they are supported in their academic programs, personal development and leadership opportunities by Residence Life Staff and Jesuit Counselors. Upper-class students may select from a range of housing options that include University houses, apartment buildings, suite-style halls with semi-private baths and traditional halls with single and double rooms. Upper-class students may also participate in the Gavigan Residential College and its Faculty Involvement Programs, or they can choose a Theme House that provides intense experiences in theatre, Spanish language and culture, education, technology, community service, wellness, fine arts and music, or international culture. The University also provides limited apartment-style housing for graduate students.The main goal of the residential experience is for each student to learn while living in this community environment. The process for this occurs through the active participation of the resident in his or her learning. Learning occurs best when students attempt to incorporate their in-class and extra-curricular experiences. In turn, programs and services offered through the Office of Residence Life are aimed at involving students in their learning.

The individual residential communities are designed for active student participation in their community. A basic expectation is for each student to respect the rights of other students. The privilege of living in a student residence is accompanied by the responsibility of positive community building.

Residence Life stresses the importance of high achievement in the academic and community realm. In turn, it is expected that students make healthy decisions regarding substances, stress and time management, relationships, and the exploration of their faith.

(For room-and-board fee and housing information, policies and guidelines, see "Student Expenses.")

The Office of Residence Life is located in Fr. Gallery House, 413 Quincy Avenue, and is open Monday through Friday from 8:30 a.m. to 4:30 p.m. (570-941-6226).

STUDENT HEALTH SERVICES

Because maintaining good health is an essential part of success in college, Student Health Services is committed to helping students develop the knowledge, attitudes and skills they need for an optimum level of health and wellness. This involves health-promotion and prevention education as well as direct health services.

Student Health Services offers confidential health care to all University students in an ambulatory clinic in the Roche Wellness Center. Care includes unlimited visits for nursing assessment, primary treatment for illness and injury, health and wellness information and appointments with physicians or a nurse practitioner. Cooperative relationships with community health-care providers such as laboratories, pharmacies, hospitals and medical specialists complement the care offered on campus.

The Student Health Service operates from 8:30 a.m. until 6:00 p.m. Monday through Thursday and from 8:30 a.m. until 4:30 p.m. on Friday. There are three full-service hospitals within just a few blocks of the University which provide a full range of emergency and specialty services to students when necessary. Transportation to other health-care providers is provided through a special contractual agreement with an ambulance service that is available 24 hours a day, every day.

Because all health-care services provided to students on campus are covered by University fees, Student Health Services does no third-party billing. Care by community providers such as laboratory, x-ray, private physicians or specialists in the community, emergency-room visits or hospitals, however, are subject to private payment or insurance coverage. All students should have health insurance and should know how to access coverage if necessary. Information about an optional insurance plan for students who do not have insurance coverage through another plan is available through Student Health Services.

CENTER FOR HEALTH EDUCATION AND WELLNESS

In keeping with the Jesuit tradition of educating the whole person, the University Center for Health Education and Wellness encourages healthy life-style choices by providing educational programs and referrals for all students. Examples of past offerings include Smoking Cessation Workshops, Professional Development Series, Care of an Intoxicated Friend Seminars and Nutritional Seminars. Current offerings are posted on campus each semester.

The Center for Health Education and Wellness also is home to the University's Peer Education programs. Peer Educators volunteer their time to provide formal educational presentations as well as individual referral assistance to their fellow students on issues related to alcohol and other drug use, sexual assault and HIV/AIDS. These "students helping students" gain valuable leadership experience, sharpen their communication skills and deepen their own understanding of these critical health issues. Students interested in applying to be a Peer Educator are encouraged to contact the Center for Health Education and Wellness or a current Peer Educator for further information.

The Center for Health Education and Wellness, at the corner of Mulberry Street and North Webster Avenue, is open from 8:30 a.m. until 4:30 p.m. Monday through Friday and evenings by appointment. For appointments, stop by the Center for Health Education and Wellness or call (570) 941-4253.

OTHER EXTRACURRICULAR ACTIVITIES

DEBATE

The tradition of debate in Jesuit colleges and high schools is also strong at the University of Scranton. The Noel Chabanel Council of Debate gives interested students an opportunity to compete in debate and speech events on the intercollegiate level. The University of Scranton debaters travel thousands of miles each year nationwide; the 1988 team took first honors in the finals of the Pennsylvania College Energy Debates.

RADIO

WUSR, 99.5 FM, is a student operated radio station with over sixty participants. The format is eclectic with world, classical, jazz, urban and alternative music. In keeping with the University's mission the station produces public affairs programming and provides the community with an alternative to commercial radio. Students are encouraged to become involved with all aspects of the station, from on-air positions to management. The station broadcasts at 300 watts with a coverage area of 700 square miles, covering the Scranton/Wilkes-Barre metropolitan area, with an audience of over 250,000.

TELEVISION

The Royal College Television Network gives students the opportinity for hands-on experience in television production. Students take the initiative in producing, directing, writing, shooting, and editing television programs to express their creativity. These programs range from comedy, sports, and film reviews, to news and public affairs. Programs produced by students appear on the Movie Channel of the campus cable television system.

THEATRE

The tradition of theatre and dramatics in Jesuit colleges goes back four-hundred years. The University of Scranton has played a vital part in that tradition as evidenced by the many theatre professionals who were undergraduates of the University: the late Jason Miller (Pulitzer-Prize winning playwright/Academy Award nominee); broadway actor and director, Walter Bobbie (Tony Award winning director) and Stan Wojewodski Jr., former Dean of the Yale School of Drama, to name just a few.

Today, the University Players produce a main-stage season along with a festival of student-written plays, and a workshop devoted to new student directors. Over 150 students, from virtually every major, participate on and off stage in the productions each year. The theatre program is housed in a modern state-of-the-art facility, complete with a 300-seat main stage, flexible studio theatre, scenery and costume shops, and additional support spaces.

The University Players have historically been host to many prominent guest artists. Oscar-winning British actress Glenda Jackson conducted an acting workshop, actor Richard Harris directed a production of Julius Caesar in 1988, and, in 1998, Emmy-award winner Dennis Size created the set and lighting designs for the players' production of *Lysistrata.*

Participation in the Players is open to all students, regardless of major. Interested students should contact the Director of Theatre in the McDade Center for Literary and Performing Arts, Room 103.

PUBLICATIONS

The University offers a wide choice of journalism opportunities.

The *Aquinas* is the weekly, award-winning campus newspaper, and positions are available to all full-time undergraduate students.

Esprit is the award-winning campus literary journal.

History students have the opportunity to have their articles published in *Retrospect*, which is a student-faculty historical journal.

The yearbook, *Windhover*, is produced annually by students.

PERFORMANCE MUSIC AT THE UNIVERSITY OF SCRANTON

The University of Scranton Bands, Choirs, and String Ensembles offer high quality instrumental and choral performing ensemble opportunities in a variety of formats ranging from very large ensembles, to small-ensemble and solo performing opportunities. In the finest liberal arts tradition, participation is open to any and all interested university students (as well as faculty, staff and administration) with no individual audition requirement nor enrollment or membership fee.

The University of Scranton Performing Arts series presents concert performances by outstanding and renowned musicians representing a variety of musical genres, and closely coordinates programming with the Bands, Choirs and String Ensembles to offer special masterclasses, workshops and lectures by our visiting artists.

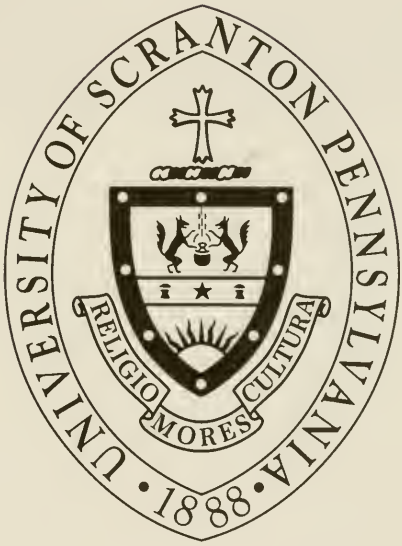
All performances are free of charge and open to the public, and most take place in the magnificently restored concert hall of the Houlihan-McLean Center on our campus.

Our tradition of guest artists and clinicians has brought to our student musicians, our campus and our community the joyful experience of performing with and hearing a long list of musical masters, among them Seneca Black; Wycliffe Gordon; Victor Goines; Bridgett Hooks; T. Terry James; Robert Kapilow; Wynton Marsalis; Sam Pilafian; Eric Reed; Joshua Rosenblum; Loren Schoenberg; Robert Starer; Melissa Thorburn; Lawrence Wolfe; George Young; members of the New York, Philadelphia, Boston, Minnesota and Dallas Symphony Orchestras and The Lincoln Center Jazz Orchestra; "Travelin' Light"; members of the Empire Brass Quintet; and recently deceased composer-in-residence Vaclav Nelhybel, whose long and productive relationship with the University continues to be honored through close cooperation between the University and the Nelhybel Estate with the establishment of "The Nelhybel Collection."

The programs include an annual World Premiere Composition Series performance, the only series of its kind in the nation, which has received honor and acclaim from artists throughout the world. Currently in its 18th year, the series has provided our students with opportunities to work and interact with internationally renowned composers and conductors, and has made significant contributions to the wind and choral repertoires.

Hundreds of students participate in the ensembles every year, and they are achieving their performance goals in the musical ensemble of their choice. For more information on any of our Performance Music offerings, please visit our website at www.scranton.edu/music, or contact Cheryl Y. Boga, Conductor and Director of Performance Music, at music@scranton.edu or (570) 941-7624.

Campus Ministry



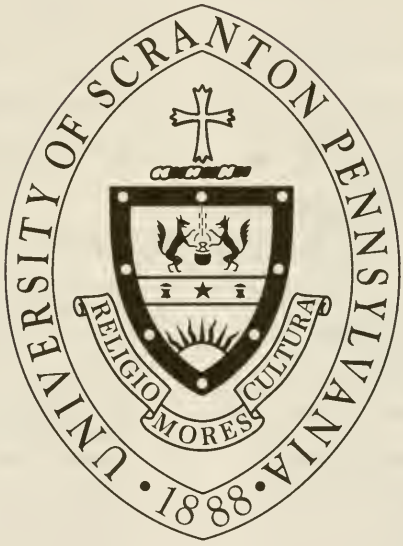
We invite members of the entire University commumity to join us in reflection, celebration and service as we work together to promote justice, to revere life in all its diversity and to grow closer to God.

CAMPUS MINISTRY

As a Catholic institution, The University of Scranton is dedicated to promoting continued growth in personal maturity and freedom, especially as religious believers and persons dedicated to service of the human family. The specifically spiritual ministry of the entire University community is coordinated by the office of Campus Ministry assisted by the Jesuits, other clergy, University staff members and students themselves. Regular daily and Sunday liturgies and other special services are conducted in the Madonna della Strada chapel and St. Ignatius chapel. Spiritual counseling is available from the staff and the Jesuits, especially the Residence Hall Counselors. These people make available their training, experience, and friendship to promote greater self awareness, maturity, integration, and ability to pray, as well as to identify obstacles to these and other goals.

Persons seeking time for quiet reflection, directed prayer or an experience of Christian community are invited to participate in frequent programs at nearby Chapman Lake. Campus Ministry also sponsors lectures and discussions on vital issues, organizes special events to heighten religious awareness, assists in services to the larger community, and is responsible to act as spokesman for justice within the University. In conjunction with Rev. Rees Warring of Elm Park Methodist Church and other local non-Catholic clergy, students of non-Catholic faiths are encouraged to help plan an expansion of services to themselves.

University Directory



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William H. Finn, '67
Gerald P. Fogarty, S.J.
Leslie A. Galbraith, '83
Michele Gilfillan, '98
Theodore Jadick, '61
Thomas F. Karam, '81
Barbara M. Karper
Herbert B. Keller, S.J.
Brendan G. Lally, S.J., '70
George C. Lynett, Esq., M.B.A. '71
Michael C. McFarland, S.J.
Joseph M. McShane, S.J.
Patricia Moran, Esq., '81
Peter F. Moylan, '67
R. Barrett Noone, M.D., '61
Joseph A. Novak, S.J.
William C. O'Malley, '59
Scott R. Pilarz, S.J.
Msgr. Joseph G. Quinn, '72
Hon. Don Sherwood
Edward M. Skovira, M.D., '53
Madeleine Robinson
Jerry J. Weinberger, Esq.

OFFICERS OF THE UNIVERSITY CORPORATION

Joseph M. McShane, S.J., President

Beth E. Barnett
Provost and Vice President for Academic Affairs

David E. Christiansen
Vice President for Finance/Treasurer

Paul J. Strunk
Vice President for Institutional Advancement

Marie Angelella George
Vice President for Planning and Institutional Research

John J. Shea, S.J.
Vice President for University Ministries

Vincent Carilli
Vice President for Student Affairs

Abigail Byman
Secretary of the University, General Counsel

ADMINISTRATION

Office of the President

Joseph M. McShane, S.J. (1998)
President of the University (1998)
Professor, Theology (1998)
A.B., A.M., Boston College
M.Div., S.T.M., Jesuit School of Theology
Ph.D., The University of Chicago

J.A. Panuska, S.J., D. et U. * (1982)
President Emeritus (1998)
B.S., Loyola College
Ph.L., St. Louis University
Ph.D., St. Louis University
S.T.L., Woodstock College

Abigail Byman (1995)
Secretary of the University (1999)
General Counsel (1995)
B.A., Carleton College
J.D., University of Denver

Glenn R. Pellino (1980)
Executive Director, Office of Urban and Government Affairs (1997)
B.A., M.A., St. Louis University
Ph.D. Cand., The University of Michigan

Jo Ann Usry (2001)
Director of the Office of Equity and Diversity
B.A., Dowling College

Academic Affairs

Beth E. Barnett (2001)
Provost and Vice President for Academic Affairs (2001)
B.S., Slippery Rock University of Pennsylvania
M.A., M.Ed., Ed.D., Columbia University

Jerome P. DeSanto, D. et U.* (1979)
Associate Provost for Information Resources (1996)
B.S., M.B.A., The University of Scranton

Charles E. Kratz (1992)
Director of Library (1992)
B.A., M.A., University of Notre Dame
M.L.S., University of Maryland

Joseph H. Dreisbach D. et U.* (1978)
Dean, College of Arts and Sciences (1997)
Professor, Chemistry (1989)
B.A., LaSalle University
M.S., Ph.D., Lehigh University

Mary F. Engel (1986)
University Director of Fellowship Programs (2000)
Director of Medical School Placement (1996)
Associate Professor, English (1986)
B.A., St. Bonaventure University
L.L., Katholieke Universiteit te Leuven
Ph.D., Kent State University

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Shirley M. Adams (1986)
Dean, Dexter Hanley College,
Director of Instructional Development
and of Learning Resources Center (1986)
Associate Professor, Education (1996)
B.A., University of Northern Iowa
M.A., University of Iowa
Ph.D., Iowa State University
Ronald D. Johnson (1997)
Dean, Arthur J. Kania School
of Management (1997)
Professor, Mgmt/Mkt (1997)
B.S., M.B.A., D.B.A., Indiana University
Ralph W. Grambo, Jr. D.et U* (1973)
Associate Dean, Kania School
of Management (2000)
B.S., The University of Scranton
M.B.A., Ph.D., University of Pennsylvania
James J. Pallante (1991)
Dean, Panuska College of
Professional Studies (1991)
Professor, Health Administration and
Human Resources (1991)
Professor, Education (1994)
B.A., La Salle University
M.S., Temple University
M.A., Glassboro State College
Ed.D., Rutgers University
Duncan M. Perry (2002)
Dean, Graduate School (2002)
Director of Research (2002)
Professor, History (2002)
A.B., Davis and Elkins College
M.A., Ohio University
Ph.D., The University of Michigan

Finance
David E. Christiansen (1987)
Vice President for Finance/Treasurer (1987)
B.S., M.B.A., LaSalle University
Darrell R. Frederick, SPHR (1996)
Director of Human Resources (1996)
B.S., Penn State University
Martin L. Langan, D. et U. * (1974)
Associate Vice President for Operations, (1988)
B.S., M.B.A., The University of Scranton
Edward J. Steinmetz, C.P.A. (1991)
Assistant Vice President for Finance (1993)
B.S., M.B.A., The University of Scranton

Campus Ministry
John J. Shea, S.J. (1999)
Vice President for University Ministries (2002)
B.A., Fordham University
M.Ed., Boston College
M.Div., Woodstock Jesuit College
Ph.D., Catholic University of America
Thomas D. Masterson, S.J., D. et U.* (1976)
University Chaplain (1989)
Assistant Professor, History (1976)
A.B., M.A., Fordham University
Ph.L., S.T.B., S.T.L., Woodstock College
M.A., Ph.D., Georgetown University

Student Affairs
Vincent Carilli (2001)
Vice President for Student Affairs (2001)
B.S., East Stroudsburg University
M.Ed., Kutztown University
Ph.D., Southern Illinois University
at Carbondale

Institutional Advancement
Paul J. Strunk (2001)
Vice President for
Institutional Advancement (2001)
B.A., University of Pittsburgh

Planning And Institutional Research
Marie Angelella George (1993)
Vice President for Planning and
Institutional Research (2000)
Associate Professor, Health Administration and
Human Services (1999)
B.S., College Misericordia
M.S., The University of Scranton
Ph.D., University of Pennsylvania

EMERITI

George V. Babcock, M.B.A., D. et U.* (1963)
Associate Dean Emeritus, SOM
Department of Economics/Finance
Thomas N. Beckish, M.S. (1964)
Counselor Emeritus/SOM Advising Center
Assistant Professor, Psychology
Marilyn Coar, B.A., D. et U.* (1948)
University Secretary Emerita
John R. Gavigan, A.B., D. et U. * (1950)
Vice President Emeritus for Student Affairs
John S. Flanagan, M.S., D. et U. * (1974)
Vice President Emeritus for Administrative Services
Zim E. Lawhon, M.S., D. et U. * (1964)
Department of Military Science
Registrar Emeritus
Bernard R. McIlhenny, S.J., M.A., S.T.B., D. et U.* (1958)
Dean of Admissions Emeritus
Robert T. Ryder, M.B.A., D. et U. * (1946)
Vice President Emeritus for Finance/Treasurer
Robert J. Sylvester, M.A., (1983)
Vice President Emeritus for
Institutional Advancement

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FACULTY

PROFESSORS EMERITI

Panos Apostolidis, Ph.D.
(1977-1989)
Department of Management/Marketing

Patricia A. Bailey, R.N., Ed.D.
(1983-2001)
Department of Nursing

John J. Baldi, M.S.S.W., D.S.S.
D. et U. * (1948-1981)
Department of Sociology

Mrigen Bose, Ph.D.
D. et U. * (1968-2002)
Department of Economics/Finance

Richard J. Bourcier, Ph.D.
D. et U. * (1968-1993)
Department of Foreign Languages and Literatures

Edward J. Capestany, Ph.D.
D. et U.* (1968-1996)
Department of Philosophy

Frank A. Cimini, M.A., L.H.D.
D. et U. * (1941-1985)
Department of Foreign Languages and Literatures

John J. Clarke, Ph.D.
(1986-1995)
Department of Communication

James J. Cunningham, Ed.D
D. et U. * (1968-1997)
Department of Counseling/Human Services

Francis H. Curtis, M.Ed.
D. et U. * (1966-1993)
Department of Education

Joseph C. Dougherty, Ph.D.
D. et U. * (1967-1991)
Department of History/Political Science

Joseph T. Evans, Ph.D.
D. et U. * (1953-1993)
Department of Biology

A. John Giunta, Ph.D.
D. et U. * (1960-1993)
Department of Economics/Finance

Joseph M. Hamernick, S.J., S.T.B., M.A.
D. et U. * (1970-1993)
Department of Communication

Maurice I. Hart, Jr., Ph.D.
D. et U. * (1963-2001)
Department of Chemistry

Eileen B Hewitt, M.S.
(1982-1999)
Department of Management/Marketing

Daniel J. Houlihan, J.D.
D. et U. * (1947-1985)
Department of Accounting

Anne J. Jones, M.A.
D. et U. * (1967-1987)
Department of Fine Arts (1975-1986)

Raymond L. Kimble, Ed.D.
D. et U. * (1973-1993)
Department of Education

M. Jane Kopas, O.S.F., Ph.D.
D. et U. * (1978-2001)
Department of Theology/Religious Studies

Dennis S. Martin, Ed.D.
1985-2002
Department of Computing Sciences

Marianne McTighe, M.S.
D. et U. * (1946-1986)
Library

John J. Murray, Ph.D.
D. et U. * (1957-1988)
Department of English

Mildred A. Norton, M.S.
D. et U. * (1946-1988)
Library

John J. Quinn, S.J., Ph. D.
D. et U. * (1956-1992)
Department of English

Richard W. Rousseau, S.J., Ph.D.
D. et U. * (1978-2001)
Department of Theology/Religious Studies

Angelina T. Scardamaglia, M.S.
D. et U. * (1947-1978)
Library

Larry R. Sherman, Ph.D.
D. et U. * (1981-1999)
Department of Chemistry

Cheng Hwa Siao, M.A., M.S.L.S.
D. et U. * (1969-1993)
Library

John K. Stout, Ed.D.
D. et U. * (1966-1997)
Department of Health Administration/Human Resources

Bernard D. Williams, M.A.
D. et U. * (1962-1997)
Department of History/Political Science

John C. Williams, M.S.
D. et U. * (1964-1990)
Department of Education

Francis J. Wormuth, J.D.
D. et U. * (1979-2001)
Department of Management/Marketing

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FACULTY OF INSTRUCTION

Brad A. Alford (1999)
Professor, Psychology (1993)
B.A., Millsaps College
M.A., Ph.D., University of Mississippi

Scott Bader-Saye (1997)
Assistant Professor, Theology/Religious Studies (1997)
B.A, Davidson College
M.Div., Yale Divinity School
Ph.D., Duke University

Harold W. Baillie, D. et U.* (1978)
Professor, Philosophy (1993)
A.B., Yale University
M.A., Ph.D., Boston College

Thomas E. Baker, D. et U. * (1975)
Associate Professor, Sociology/Criminal Justice (2000)
B.S., M.S., Virginia Commonwealth University
M.Ed., M.S., East Stroudsburg University

Galen L. Baril, D. et U. * (1975)
Associate Professor, Psychology (1985)
B.A., University of Nevada
Ph.D., University of Maine

Christopher Baumann (1984)
Professor, Chemistry (1998)
B.S., Oregon State University
Ph.D., University of Florida

Rebecca S. Beal (1983)
Professor, English (1995)
A.B., Westmont College
M.A., University of Chicago
Ph.D., University of Texas

John Begley, S.J., D. et U.* (1975-79, 1985)
Associate Professor, Theology/Religious Studies (1985)
A.B., M.A., Boston College
Ph.L., S.T.L., Weston College
S.T.D., Gregorian University

John A. Beidler, C.D.P., D. et U. * (1964)
Professor, Computing Sciences (1976)
A.B., King's College
M.A., Lehigh University
Ph.D., The Pennsylvania State University

Paul R. Beining, S.J., D. et U. * (1949-1951, 1967)
Professor, Biology (1974)
B.S., Ph.L., Spring Hill College
S.T.L., Woodstock College
M.S., Ph.D., The Catholic University of America

J. Brian Benestad, D. et U.* (1976)
Professor, Theology/Religious Studies (1989)
A.B., Assumption College
S.T.L., Gregorian University
Ph.D., Boston College

W. Andrew Berger (1989)
Professor, Physics/Electrical Engineering (2001)
M.S., Technical University of Poznan, Poland
M.S., Ph.D., Drexel University

Robert M. Bessoir, D. et U. * (1968)
Professor, Exercise Science and Sport (1994)
B.S., The University of Scranton
M.S., East Stroudsburg University

Yaodong Bi (1991)
Associate Professor, Computing Sciences (1997)
B.S., M.S., Northeast University of Technology
Shenyang, People's Republic of China
Ph.D., University of Illinois

Gerald Biberman, D. et U.* (1981)
Professor, Management/Marketing (2001)
Chairperson, Management/Marketing (1992)
B.A., M.A., Ph.D., Temple University

David W. Black (1984)
Professor, Philosophy (1994)
B.A., Northern Illinois University
M.A., Ph.D., The Pennsylvania State University

Lori A. Bruch (1995)
Associate Professor, Counseling and Human Services (2002)
B.S., M.Ed., The Pennsylvania State University
M.S., The University of Wisconsin-Stout
Ed.D. George Washington University

Alan L. Brumagim (1990)
Associate Professor, Management/Marketing (1996)
B.B.A., The Pennsylvania State University
M.B.A., Ph.D., Temple University

James P. Buchanan, D. et U.* (1977)
Associate Professor, Psychology (1981)
Chairperson, Department of Psychology (1993)
B.A., The Johns Hopkins University
M.A., Ph.D., University of California, Los Angeles

Timothy Cadigan, S.J. (1999)
Assistant Professor, Biology (1999)
B.S., St. Louis University
M.Div., Th.M. Weston School of Theology
M.S., Ph.D., Georgetown University

Cynthia Cann (1994)
Associate Professor, Management/Marketing (2002)
B.S., M.B.A., The University of Scranton
Ph.D., Binghamton University

Michael C. Cann, D. et U. * (1975)
Professor, Chemistry (1988)
B.A., Marist College;
M.A., Ph.D., State University of New York at Stony Brook

Joseph M. Cannon, D. et U. * (1959)
Professor, Education (1997)
B.S., The University of Scranton
M.Ed., Doctoral Studies, The Pennsylvania State University
Licensed Psychologist

J. Timothy Cannon, D. et U.* (1981)
Professor, Psychology (1997)
B.S., The University of Scranton;
Ph.D., University of Maine

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Michael D. Carey D. et U.* (1978)
Professor, Biology (1990)
B.A., Wittenberg University
M.A., Ph.D., Indiana University

Brian Carpenter, C.M.A. (1987)
Professor, Accounting (1998)
M.B.A., The University of Scranton
B.S., Ph.D., The Pennsylvania State University
Alperin Teaching Fellow (1999)

Dona Carpenter, R.N. (1985)
Professor, Nursing (1999)
B.S.N., College Misericordia
M.S.N., Villanova University
M.Ed., Ed.D., Columbia University

Maureen T. Carroll (1995)
Assoc. Professor, Mathematics (2001)
B.A. LaSalle University
M.S., Ph.D. Lehigh University

Ellen Miller Casey, D. et U. * (1969)
Professor, English (1981)
B.S., Loyola University, Chicago;
M.A., University of Iowa
Ph.D., University of Wisconsin

Stephen J. Casey, D. et U. * (1969)
Associate Professor, Theology/Religious Studies (1981)
A.B., Iona College
M.A., Marquette University

Timothy K. Casey (1987)
Professor, Philosophy (1996)
B.A., Loras College
M.A., University of Pittsburgh
M.A., Ph.D., Duquesne University

Raymond W. Champagne, Jr., D. et U. * (1967)
Professor, History (1981)
A.B., Providence College
M.S., Duke University
Ph.D., Loyola University, Chicago

Leonard Champney, D. et U. * (1979)
Professor, Political Science (1992)
Chairperson, Political Science (1998)
B.S., University of Texas, El Paso
Ph.D., Rutgers University

Satya P. Chattopadhyay (1990)
Associate Professor, Management/Marketing (1997)
B.M.E., Jadaupur University;
P.G.D.M., Indian Institute of Management, Calcutta
Ph.D., Virginia Polytechnic Institute and State University

Ying I. Chien, D. et U. * (1979)
Associate Professor, Operations and Information Management (1979)
B.S., National Taiwan University
M.S., University of Manitoba
Ph.D., University of Kentucky

Jafor Chowdhury (1987)
Associate Professor, Management/Marketing (1993)
B. Comm., M. Comm., Dacca University
M.B.A., Dalhousie University
Ph.D., Temple University

Elizbeth Ciaravino (2001)
Assistant Professor, Occupational Therapy (2001)
B.A., State University of New York at Buffalo
M.S., Boston University
Ph.D., Institute of Advanced Psychological Studies, New York

Joseph F. Cimini, D. et U.* (1980)
Associate Professor, Sociology/Criminal Justice (1994)
Chairperson, Department of Sociology/Criminal Justice (2001)
B.A., The University of Scranton
J.D., Columbus School of Law,
The Catholic University of America

Thomas Joseph Ciucci, OTR/L (1999)
Instructor, Occupational Therapy (2000)
B.S., Virginia Commonwealth University
M.S., College Misericordia

Graeme Coetzer (2002)
Instructor, Health Administration, Human Resources (2000)
B. Comm., University of South Africa
M.B.A., Ph.D. cand., Simon Fraser University

Thomas M. Collins (1989)
Associate Professor, Counseling and Human Services (1998)
B.S., Kutztown University
M.L.S., Rutgers University
Ed. M., Temple University
Ph.D., State University of New York at Albany
Licensed Psychologist
National Certified Counselor

Tracey L. Collins (2002)
Lecturer, Physical Therapy (2002)
B.S., The University of Scranton
M.B.A., UNC-Wilmington

Joseph W. Connolly (1983)
Professor, Physics/Electrical Engineering (1992)
B.S., The University of Scranton
M.S., University of Illinois
Ph.D., The Pennsylvania State University

Willis M. Conover, D. et U.* (1978)
Professor, History (1993)
B.A., B.S., The Pennsylvania State University
M.S., Ed.D., Montana State University

John R. Conway (1985)
Associate Professor, Biology (1985)
B.S., The Ohio State University
M.A., Ph.D., University of Colorado

Frank P. Corcione, D. et U.* (1978-1979, 1982)
Associate Professor, Economics/Finance (1982)
B.A., Moravian College
M.A., Ph.D., Lehigh University

Barbara Cozza (1997)
Associate Professor, Education (2002)
B.F.A., M.S., Hunter College
Ph.D., Fordham University

Wayne H.J. Cunningham (1987)
Associate Professor, Operations and Information Management (1987)
B.S, M.B.A., Ph.D., The Pennsylvania State University

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Harry R. Dammer (2002)
Associate Professor, Sociology/Criminal Justice (2002)
B.S., M.S., University of Dayton
Ph.D., Rutgers University School of Criminal Justice

Ronald W. Deitrick (1998)
Associate Professor, Exercise Science and Sport (1998)
A.B., Villanova University
M.S., University of Utah
Ph.D., University of Maryland

Michael D. DeMichele, D. et U. * (1967)
Professor, History (1974)
Chairperson, Department of History (1998)
B.S., The University of Scranton
M.A., Ph.D., The Pennsylvania State University

Vito DelVecchio, D. et U. * (1969)
Professor, Biology (1977)
B.A., The University of Scranton
M.S., St. John's University
Ph.D., Hahnemann Medical College Graduate School

Jones DeRitter (1990)
Chairperson, Department of English (1999)
Professor, English (2002)
A.B., Oberlin College
M.A., Ph.D., University of Virginia

Linda H. Desmond, R.N. (1987)
Assistant Professor, Nursing (1990)
R.N., Beebe Hospital School of Nursing
B.S.N., Cedar Crest College
M.S.A.N., University of Delaware
Ed.D., Columbia University

Trudy A. Dickneider (1984)
Professor, Chemistry (1997)
B.A., M.A., St. Joseph's College
Ph.D., University of Miami

Mary Jane DiMattio (1993)
Assistant Professor, Nursing (1999)
B.S., The University of Scranton
M.S.N., Villanova University
Ph.D., University of Pennsylvania

Anthony J. DiStefano, D. et U. * (1968)
Associate Professor, Physics/ Electrical Engineering (1977)
B.E.E., Brooklyn Polytechnic Institute
M.A., Columbia University
Ph.D., Stevens Institute of Technology

Curt Dixon (2001)
Assistant Professor, Exercise Science & Sport (2001)
B.S., Lock Haven University
M.S., Bloomsburg University
Ph.D., University of Pittsburgh

Roy Palmer Domenico (1997)
Associate Professor, History (1999)
B.A., University of Wisconsin
M.A., University of Connecticut
Ph.D., Rutgers University

Steven T. Dougherty (1992)
Associate Professor, Mathematics (1997)
B.S., The University of Scranton
M.S., Ph.D., Lehigh University

Katie S. Duke (1985)
Associate Librarian (1990)
B.A., California Baptist College
M.L.S., University of Oklahoma
M.S., The University of Scranton

Josephine M. Dunn (1988)
Associate Professor, History (1998)
B.A., B.F.A. University of Houston
M.A., Ph.D., University of Pennsylvania

John J. Dunstone, D. et U. * (1966)
Professor, Psychology (1974)
B.S., The Pennsylvania State University
M.S., Ph.D., University of Massachusetts

Michael Dutko (1985-1989, 1991)
Associate Professor, Mathematics (1993)
B.S., The Pennsylvania State University
A.M., The University of Michigan
Ph.D., The Pennsylvania State University

Kathleen G. Dwyer (1988)
Associate Professor, Biology (1993)
B.S., East Stroudsburg University
M.A., Ph.D., Princeton University

Gary E. Eichelsdorfer, D. et U. * (1965)
Associate Professor, Mathematics (1979)
A.B., Gannon College
M.A., University of Detroit

Laura Helene Ellis, C.P.A. (1994)
Associate Professor, Accounting (2001)
B.A., Carroll College
M.Acc., University of Montana
Ph.D., University of Oregon

Lee Ann Eschbach (1986)
Associate Professor, Counseling and Human Services (1995)
B.S., M.S., Ph.D., Washington State University

Paul Fahey, D. et U. * (1968)
Professor, Physics/Electrical Engineering (1978)
B.S., The University of Scranton
M.S., Ph.D., University of Virginia

Matthew J. Fairbanks, D. et U. * (1960)
Professor, Philosophy (1970)
B.S., M.A., Loyola University, Chicago
Ph.D., University of Notre Dame

Marian Farrell, R.N. (1990)
Professor, Nursing (2002)
B.S.N., M.S.N., College Misericordia
M.S., Syracuse University
Ph.D., Adelphia University

Anthony Ferzola (1990)
Associate Professor, Mathematics (1990)
B.A., Queens College
M.A., Ph.D., New York University

Mary Anne Foley, C.N.D. (1991)
Associate Professor, Theology and Religious Studies (1997)
B.A., Sacred Heart University
M.T.S., Weston School of Theology
M. Phil., Ph.D., Yale University

Timothy Daniel Foley (1999)
Assistant Professor, Chemistry (1999)
B.S., Providence College
Ph.D., University of Rhode Island

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Daniel V. Fraustino, D. et U.* (1982)
Professor, English (1991)
B.A., State University of New York at Buffalo
M.A., San Diego State University
Ph.D., Binghamton University

Brigid Curtin Frein (1988)
Associate Professor, Theology and Religious Studies (1997)
B.A., Gonzaga University
Ph.D., St. Louis University

Michael Friedman (1991)
Professor, English (2001)
B.A., Tulane University
M.A., Ph.D., Boston University

David O. Friedrichs, D. et U.* (1977)
Professor, Sociology/Criminal Justice (1991)
A.B., University College of New York
M.A., New York University

Joseph A. Fusaro, D. et U.* (1974)
Professor, Education (1983)
B.A., Rider College
M.Ed., University of Vermont
Ed.D., State University of New York at Albany

Rosellen M. Garrett, CRNP, D. et U.* (1980)
Associate Professor, Nursing (1980)
B.S.N., College Misericordia
M.S., University of Maryland
F.N.P., Binghamton University
Ph.D., Medical College of Pennsylvania

Darla Rae Germeroth (1989)
Professor, Communication (2000)
B.A., M.A., Kansas State University
Ph.D., University of Denver

Thomas W. Gerrity, D. et U.* (1976)
Associate Professor, Education (1986)
B.S., University of Pennsylvania
M.S., The University of Scranton
Ed.D., Columbia University

Satyajit P. Ghosh (1986)
Professor, Economics/Finance (1999)
Chairperson, Department of Economics/Finance (1993)
B.A., Presidency College, India
M.A., University of Calcutta
M.A., Ph.D, State University of New York at Buffalo

Toni Glover (2001)
Instructor, English (2001)
B.A., M.A., University of Texas at Arlington
Ph.D. cand., University of Texas at Dallas

S. Kingsley Gnanendran (1989)
Associate Professor, Operations and Information Management (1995)
B.Sc., University of Sri Lanka
M.Eng., Asian Institute of Technology
Ph.D., University of Tennessee

Irene Goll (1988)
Associate Professor, Management/Marketing (1994)
B.S., The Pennsylvania State University
M.A., University of Illinois
Ph.D., Temple University

Deborah J. Gougeon, D. et U * (1979)
Associate Professor, Operations and Information Management (1988)
B.S., M.S., The University of Scranton
Ph.D., Walden University

Leonard G. Gougeon, D. et U * (1974)
Professor, English (1982)
B.A., St. Mary's University, Halifax
M.A., Ph.D., University of Massachusetts

Ronald J. Grambo, C.P.A., D. et U.* (1976-77; 1980)
Associate Professor. Accounting (1985)
B.S., M.B.A., The University of Scranton
M.S., The University of Scranton
Ph.D., The Pennsylvania State University

Marybeth Grant-Beuttler, M.S., P.T. (1998)
Assistant Professor, Physical Therapy (2001)
B.S., Northwestern University Medical School
M.S., University of North Carolina at Chapel Hill

David Hair (1986)
Assistant Professor, Exercise Science and Sport (1991)
B.S., M.Ed., East Stroudsburg University
M.S., The University of Scranton

Renee M. Hakim (1996)
Assistant Professor, Physical Therapy (1996)
B.S., The University of Scranton
M.S., University of Pittsburgh
Ph.D., Temple University

David W. Hall (1985)
Associate Professor, Counseling and Human Resources (1991)
A.B., Lycoming College
M.S., The University of Scranton
Ph.D., The Pennsylvania State University
Licensed Psychologist
Certified Rehabilitation Counselor

Joyce Hanks (1989)
Professor, Foreign Languages and Literatures (1995)
M.A., University of Wisconsin
B.A., Ph.D., Washington University

Mary Jane Hanson (1996)
Associate Professor, Nursing (2000)
B.S.N., Cedar Crest College;
M.S.N., Ph.D., University of Pennsylvania

Michael A. Hardisky (1984)
Chairperson, Department of Biology (1999)
Professor, Biology (1995)
B.S., Lebanon Valley College
M.S., Ph.D., University of Delaware

Patricia Harrington, R.N. (1984)
Associate Professor, Nursing (2000)
Chairperson, Department of Nursing (1994)
B.S., Medgar Evers College
M.S., Hunter-Bellevue School of Nursing;
M.Ed., Ed.D., Columbia University

Jean Wahl Harris (1987)
Associate Professor, Political Science (1993)
B.A., M.A., Ph.D., Binghamton University

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

John M. Hill, D. et U.* (1981)
Professor, English (2000)
B.A., Central College
M.A., University of Illinois
M.F.A., University of Iowa
Ph.D. cand., University of Illinois
Tim Hobbs (1997)
Associate Professor, Education (2002)
B.A., M.A., Sonoma State University
Ph.D., Florida State University
Gregory A. Hoch (2001)
Lieutenant Colonel, U.S. Army
Professor, Military Science (2001)
B.A., Troy State University
Thomas P. Hogan (1985)
Professor, Psychology (1985)
B.A., John Carroll University
M.A., Ph.D., Fordham University
Frank X.J. Homer, D. et U. * (1968)
Professor, History (1984)
A.B., The University of Scranton
M.A., Ph.D., University of Virginia
John S. Hopkins, D. et U. * (1967)
Assistant Professor, Exercise Science and Sport (1970)
B.S., East Stroudsburg University
M.S., University of Massachusetts
Sharon Hudacek, R.N. (1990)
Associate Professor, Nursing (1995)
B.S.N., M.S.N., College Misericordia
M.Ed., Ed.D., Columbia University
Robert E. Hueston, D. et U. * (1968)
Associate Professor, History (1976)
A.B., College of the Holy Cross
M.A., Ph.D., University of Notre Dame
Riaz Hussain, D. et U. * (1967)
Associate Professor, Economics/Finance (1985)
B.S., Forman College, Pakistan
M.S., University of Punjab, Pakistan
M.B.A., The University of Scranton
Ph.D., Johns Hopkins University
Ph.D., Lehigh University
Chartered Financial Analyst
Moses N. Ikiugu (1999)
Assistant Professor, Occupational Therapy (1999)
B.A., M.A., United States International University
Ph.D., Texas Woman's University
Paul M. Jackowitz, C.D.P., C.C.P., D. et U. * (1977-80; 1982)
Assistant Professor, Computing Sciences (1982)
B.S., The University of Scranton
M.S., Rensselaer Polytechnic Institute
Elizabeth J. Jacob (1998)
Assistant Professor, Counseling/Human Services (1998)
B.A., New York University
M.S., The University of Scranton
Ph.D., Lehigh University
Jakub S. Jasinski (1987)
Professor, Mathematics (1999)
Chairperson, Department of Mathematics (1996)
M.S., Ph.D., University of Gdansk
Bernard J. Johns, D. et U. * (1961)
Associate Professor, Mathematics (1979)
A.B., Wilkes College
M.A., Bucknell University
Maria Poggi Johnson (1996)
Associate Professor, Theology/Religious Studies (2002)
B.A., Oxford University
Ph.D., University of Virginia
Roxanne T. Johnson (1993)
Associate Professor, Accounting (1999)
B.A., University of Delaware
B.B.A., University of Florida
Ph.D., The Pennsylvania State University
Francis X. Jordan, D. et U. * (1966)
Associate Professor, English (1976)
A.B., M.A., The University of Scranton
Ph.D., St. Louis University
Prasadarao V. Kakumanu, D. et U.* (1978)
Professor, Operations and Information Management (1984)
Chairperson, Department of Operations and Information Management (1987)
B.S., Andhra University
M.S., Patna University
M.S., Delhi University
Ph.D., Cornell University
John R. Kalafut, D. et U. * (1965)
Professor, Physics/Electrical Engineering (1974)
B.S., The University of Scranton
M.S., University of Delaware
John Kallianiotis (1990)
Associate Professor, Economics/Finance (1996)
B.A., University of Thessalonika
M.A., M.Ph., Ph.D., City University of New York
Thomas A. Kamla D. et U.* (1978)
Professor, Foreign Languages and Literatures (1987)
B.A., St. John's University, Minnesota
M.A., Ph.D., University of Wisconsin
Mark W. Kandel (2000)
Assistant Professor, Education (2000)
B.S., East Stroudsburg University
M.Ed., Shippensburg University
Ph.D., University of Maryland
Christie Pugh Karpiak (2001)
Assistant Professor, Psychology (2002)
B.S., M.S., Ph.D., University of Utah
Jan W. Kelly (1988)
Associate Professor, Communication (1988)
B.A., The Pennsylvania State University
M.A., San Francisco State University
Ph.D., University of Minnesota
Lawrence W. Kennedy (1992)
Associate Professor, History (1998)
A.B., A.M., Ph.D., Boston College
Stephen L. Klingman, D. et U.* (1973)
Assistant Professor, Exercise Science and Sport (1977)
B.S., M.S., Ithaca College

Richard Klonoski, D. et U.* (1981)
Professor, Philosophy (1994)
B.A., The University of Scranton
M.A., Kent State University
Ph.D., Duquesne University

Michael J. Knies (1996)
Assistant Professor, Library (1998)
B.A, M.A., The Pennsylvania State University
M.L.S., Rutgers University

Robert Kocis (1989)
Professor, Political Science (2000)
B.A., St. Vincent College
M.A., Ph.D., University of Pittsburgh

Edmund M. Kosmahl (1983)
Professor, Physical Therapy (2000)
Chairperson, Physical Therapy (2000)
B.S., M.S., Temple University
Ed.D., Nova University

Gary G. Kwiecinski (1988)
Professor, Biology (2000)
B.S., Cornell University
M.S., Rutgers University
Ph.D., Cornell University

Richard A. Larsen (2000)
Lecturer, English (2000)
B.S., Northern Arizona University
M.F.A., San Diego State University

Robyn Lawrence (1993)
Associate Professor, Accounting (2000)
B.S., University of California
M.S., California State University
Ph.D., University of Houston

Linda Ledford-Miller (1985)
Professor, Foreign Languages and Literatures (1999)
B.A., University of California, Irvine
M.A., The Pennsylvania State University
M.A., Ph.D., University of Texas at Austin

Peter M. Leininger (1999)
Assistant Professor, Physical Therapy (2002)
B.A., University of Michigan
M.S., Boston University

John J. Levko, S.J., D. et U.* (1979)
Professor, Mathematics (1987)
Director, Eastern Christian Studies (1986)
B.A., M.S., Ph.D., Lehigh University
S.T.B., Gregorian University
M.A., John XXIII Institute, Maryknoll
S.E.O.L., S.E.O.D., Pontifical Oriental Institute, Rome, Italy

Rev. Albert M. Liberatore, Jr. (2001)
St. Pius X Chair in Theology (2001)
Ph.B., B.A., S.T.B., M.A., S.T.L., S.T.D./Ph.D. cand, Katholieke Universiteit te Leuven, Belgium

Frank B. Linton (1997)
Assistant Professor, Accounting (1997)
B.A., Hofstra University;
J.D., New York University School of Law
Ph.D., University of Houston

Deborah Eville Lo (1995)
Associate Professor, Education (2001)
B.S., M.S., Florida State University
Ph.D., University of Chicago

Frank J. MacEntee, S.J., D. et U. * (1965)
Professor, Biology (1973)
B.S., Spring Hill College
M.S., Ph.D., The Catholic University of America

Marjorie A. Maddox, ANP (1997)
Associate Professor, Nursing (1997)
B.S.N., University of Virginia
M.S.N., St. Louis University
Ed.D., University of Georgia

Daniel Mahoney, C.P.A. (1984)
Professor, Accounting (2002)
B.S., M.B.A., The University of Scranton
Ph.D., Syracuse University

David E. Marx (1987)
Associate Professor, Chemistry (1992)
Chairperson, Department of Chemistry (1998)
B.S., East Stroudsburg University
Ph.D., Binghamton University

Susan Fournier Mathews (1988)
Professor, Theology/Religious Studies (2000)
B.A., St. Anselm College
M.A., Ph.D., The Catholic University of America

Gary E. Mattingly (1983)
Professor, Physical Therapy (1997)
B.S., St. Ambrose College
B.S., The University of Scranton
Ph.D., St. Louis University

Tata J. Mbugua (1998)
Assistant Professor, Education (2000)
B.A., Nairobi University
M.A., Ph.D., Ohio University

Robert McCloskey (1991)
Assistant Professor, Computing Sciences (1993)
B.S., The University of Scranton
M.S., Ph.D., Rensselaer Polytechnic Institute

Christine E. McDermott , D. et U.*(1979)
Assistant Professor, Biology (1979)
B.A., California State University at Fresno
Ph.D., University of Tennessee

John W. McGinley, D. et U. * (1970)
Professor, Philosophy (1979)
A.B., College of the Holy Cross
Ph.D., Boston College

John M. McInerney, D. et U.* (1966)
Professor, English (1977)
A.B., LeMoyne College
M.A., Ph.D., Loyola University, Chicago

Robert L. McKeage, D. et U.* (1974)
Associate Professor, Marketing/Management (1993)
B.S., M.B.A., The University of Scranton
M.A., Lehigh University
Ph.D., Temple University

Ronald H. McKinney, S.J. (1984)
Professor, Philosophy (1996)
B.A., University of Maryland
M.Div., Th.M., Weston School of Theology
M.A., Ph.D., Fordham University

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Mary Helen McSweeney (1999)
Assistant Professor, Health Administration/ Human Resources (1999)
B.A., Wellesley College
M. Phil., MIA, Columbia University
Ph.D., Graduate School of the City University of New York

Sharon M. Meagher (1989)
Associate Professor, Philosophy (1995)
B.A., Boston College
Ph.D., State University of New York at Stony Brook

Michael Ofosu Mensah (1987)
Associate Professor, Accounting (1992)
Chairperson, Department of Accounting (2000)
B.S., University of Ghana
M.B.A., N.E. Louisiana University
Ph.D., University of Houston

Rebecca L. Mikesell (1994)
Assistant Professor, Communication (1994)
B.S., M.S., Illinois State University
Ph.D., Ohio University

Patrick Mohr, S.J., D. et U.* (1975)
Professor, Philosophy (1991)
B.A., M.A., Spring Hill College
Ph.D., Georgetown University

Kenneth G. Monks (1990)
Professor, Mathematics (2000)
B.S., The Pennsylvania State University
M.S., Ph.D., Lehigh University

Kathleen K. Montgomery (1998)
Associate Professor, Education (2001)
B.S., Mansfield State University
M.A., George Washington University
D. Ed., The Pennsylvania State University

Oliver J. Morgan, Ph.D.(1990)
Professor, Counseling and Human Services (2002)
Chairperson, Department of Counseling and Human Resources (1997)
B.A., Fordham University
M.F.T., Hahnemann Medical University
M. Div., Weston School of Theology
Ph.D., Boston University

Mary Elizabeth Moylan, D. et U.* (1986)
Associate Professor (1995)
Assistant Librarian II (1990)
B.A., Marywood University
M.L.S., Villanova University
M.S., The University of Scranton

Mary E. Muscari (1992)
Associate Professor, Nursing (1997)
B.S.N., Pace University
M.S.N., P.N.P., Columbia University
Ph.D., Adelphi University

Donna M. Narsavage-Heald (1993)
Associate Professor, Chemistry (1999)
B.S., The University of Scranton
M.S., Ph.D., Rensselaer Polytechnic Institute

Linda S. Neyer (2000)
Assistant Professor, Library (2002)
B.S., University of Minnesota
M.L.S., State University of New York at Albany

Hong V. Nguyen , D. et U.*(1979)
Associate Professor, Economics/Finance (1985)
B.S., State University of New York at Brockport
M.A., Ph.D., Binghamton University

John C. Norcross (1985)
Professor, Psychology (1990)
B.A., Rutgers University
M.A., Ph.D., University of Rhode Island
Clinical Internship, Brown University School of Medicine
Licensed Psychologist

Kevin M. Nordberg, D. et U. * (1970)
Professor, Philosophy (1989)
A.B., Assumption College
M.A., Ph.D., University of Notre Dame

Kevin R. Norris, D. et U.,* (1977)
Assistant Librarian II (1981)
B.S., M.L.S., University of Pittsburgh
M.A., The University of Scranton

Kelli S. O'Brien (2001)
Assistant Professor, Theology/Religious Studies (2002)
B.A., University of Arizona
M.A., Pacific Lutheran Theology Seminary
Ph.D., University of Notre Dame

John J. O'Malley, D. et U* (1968)
Associate Professor, Psychology (1971)
B.S., The University of Scranton
M.S., Ph.D., Ohio University

Michael O'Steen (2000)
Assistant Professor, English (2000)
B.F.A., M.F.A., Carnegie Mellon University

Peter C. Olden (1993)
Associate Professor, Health Administration and Human Resources (1999)
B.S., Miami University
M.H.A., Duke University
Ph.D., Virginia Commonwealth University

Masood Otarod (1988)
Professor, Mathematics (2001)
B.S., Pahlavi University
M.S., Sc.D., Columbia University

Ann A. Pang-White (1997)
Assistant Professor, Philosophy (1997)
B.A., Tung-Hai University
M.A., University of South Carolina-Columbia
Ph.D., Marquette University

William J. Parente (1970)
Professor, Political Science (1973)
A.B., Xavier University
Ph.D., Georgetown University

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Robert A. Parsons, D. et U.* (1979)
Professor, Foreign Languages and Literatures (1991)
Chairperson, Department of Foreign Languages and Literatures (1988)
B.A., M.A., West Virginia University
M.A., Ohio University
Ph.D., The Pennsylvania State University

Richard H. Passon, D.et U.* (1964)
Professor, English (1984)
University Professor (2000)
A.B., King's College
M.A., Ph.D., University of Notre Dame

Lee M. Penyak (2000)
Assistant Professor, History (2000)
B.A., Fairfield University
M.A., Ph.D., University of Connecticut

Paul M. Perdew (1985)
Associate Professor, Mathematics (1985)
B.A., Washington and Jefferson College
M.A., University of Hawaii
Ph.D., University of Idaho

Njegos Petrovic, D. et U.* (1967)
Professor, Foreign Languages and Literatures (1974)
A.B., Classical College, Belgrade, Yugoslavia
M.A., Ph.D. cand., University of Florida

Iordanis Petsas (2002)
Assistant Professor, Economics/Finance (2002)
B.A., University of Thessaloniki
M.A., Ph.D., Indiana University

Virginia A. Picchietti (1995)
Associate Professor, Foreign Languages and Literatures (2001)
B.A., Rosary College
M.A., Ph.D., Indiana University

Charles Pinches (1990)
Professor, Theology/Religious Studies (1996)
B.A., Wheaton College;
M.A., Ph.D., University of Notre Dame

Richard Plishka (1986)
Associate Professor, Computing Sciences (1989)
Chairperson, Department of Computing Sciences
B.S., The University Of Scranton
M.S., M.B.A., Syracuse University

Krzysztof Plotka (2001)
Assistant Professor, Mathematics (2002)
M.S., University of Gdansk
Ph.D., West Virginia University

Eric A. Plumer (2001)
Assistant Professor, Theology/Religious Studies (2001)
B.A., Fairfield University
B.A., M.A., University of Oxford, England
Ph.D., University of Notre Dame

Susan Poulson (1990)
Associate Professor, History (1996)
B.A., George Washington University
M.A., Ph.D., Georgetown University

Satyanarayana Prattipati (1990)
Associate Professor, Operations and Information Management (1996)
B.S., Andhra University
M.B.A., Indian Institute of Management
Ph.D., State University of New York at Buffalo

John B. Pryle, D. et U. * (1967-1969; 1972)
Assistant Professor, Sociology/Criminal Justice (1972)
B.S., The University of Scranton
M.A., Fordham University

Joseph L. Quinn, S.J., D. et U.* (1979)
Assistant Professor, English (1979)
A.B., Ph.L., A.M., Fordham University
S.T.B., Woodstock College
A.M., Ph.D., Harvard University

Murli Rajan, C.F.A., (1989)
Associate Professor, Economics/Finance (1995)
B.C.A., Victoria University
M.Comm., Delhi School of Economics, University of Delhi
M.B.A., The University of Scranton
Ph.D., Temple University

William V. Rakauskas, D. et U. * (1969)
Professor, English (1979)
B.S., M.A., The University of Scranton
Ed.D., Temple University

Donna D. Ramos, D. et U.* (1974)
Assistant Librarian II (1978)
B.A., State University of New York at New Paltz;
M.S.L.S., State University of New York at Geneseo

Matthew M. Reavy (1998)
Assistant Professor, Communication (1998)
B.A., M.A., The University of Scranton
Ph.D., University of Missouri - Columbia

Carol Reinson (1997)
Assistant Professor, Occupational Therapy (2001)
A.A.S., Herkimer County Community College
B.S., Utica College
M.S., State University of New York at New Paltz

John B. Robertson, Jr. D. et U. * (1969)
Assistant Professor, Exercise Science and Sport (1969)
B.S., Springfield College
M.A., Trenton State College

William Rowe (1990)
Professor, Philosophy (1996)
Chairperson, Philosophy (1995)
B.A., Allegheny College
M.A., Pittsburgh Theological Seminary
M.Phil., Institute for Christian Studies
Ph.D., Duquesne University

David A. Rusak (2000)
Assistant Professor, Chemistry (2000)
B.S., University of North Carolina
Ph.D., University of Florida

Midori Y. Rynn, D. et U.* (1975)
Professor, Sociology/Criminal Justice (1992)
B.A., Sophia University
M.A.L.S., The University of Michigan
M.A., Ph.D., Michigan State University

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Thomas F. Sable, S.J. (1985)
Associate Professor, Theology/Religious Studies (1991)
B.A., Boston College
M.S., Georgetown University;
M. Div., Jesuit School of Theology
Ph.D., Graduate Theological Union

Robert P. Sadowski (1987)
Professor, Communication (1987)
B.A., Michigan State University
M.S., Syracuse University
Ph.D., University of Iowa

John P. Sanko (1990)
Associate Professor, Physical Therapy (1997)
B.S., M.S., East Stroudsburg State College
Ed.D., Columbia University

Edward M. Scahill (1989)
Associate Professor, Economics/Finance (1994)
B.S., St. Bonaventure University
M.A., Ph.D., Binghamton University

Carl Schaffer (1988)
Associate Professor, English (1991)
B.A., Farleigh Dickinson University
M.A., The University of Michigan
M.F.A., University of Iowa

Rose Sebastianelli (1988)
Associate Professor, Operations and Information Management (1991)
Alperin Professor of Business Administration (1996)
B.S., Indiana University of Pennsylvania
Ph.D., The Pennsylvania State University

Robert W. Shaffern (1995)
Associate Professor, History (2001)
B.A., DePaul University
M.A., Ph.D., University of Notre Dame

Marc B. Shapiro (1996)
Associate Professor, Theology/Religious Studies (2002)
B.A., Brandeis University
Ph.D., Harvard University

Carole M. Sherlock (2000)
Lecturer, Operations and Information Management (2000)
B.S., Marywood University
M.A., Villanova University
M.B.A., The University of Scranton

Ivan A. Shibley (2000)
Assistant Profesor, Education (2000)
B.S., M.Ed., East Stroudsburg University
Ed.D., The Pennsylvania State University

James R. Sidbury (1983)
Associate Professor, Computing Sciences (1983)
B.S., Duke University
M.S., Ph.D., Auburn University

Ronald Sinzdak, D et U.* (1962-65; 1970)
Associate Professor, Mathematics (1974)
B.S., King's College
M.A., Fordham University
Ph.D., University of Missouri

Carole S. Slotterback (1995)
Associate Professor, Psychology (2000)
B.S., Wilson College
M.S., New Mexico Highlands University
Ph.D., Northern Illinois University

Steven A. Solieri (1999)
Assistant Professor, Accounting (2000)
B.B.A., Florida Atlantic University
M.S.M.M., Kettering University
M.B.A., University of Michigan-Flint
M.S., Pace University
M.S., Ph.D., Binghamton University

Robert A. Spalletta (1983)
Associate Professor, Physics/Electrical Engineering (1991)
Chairperson, Department of Physics/Electrical Engineering (1995)
B.S., Stevens Institute of Technology
MS., Ph.D., University of Rochester

E. Springs Steele, D. et U* (1979)
Professor, Theology/Religious Studies (1996)
Chairperson, Department of Theology/Religious Studies (2001)
B.A., M.A., Ph.D., University of Notre Dame

J. Michael Strong, D et U. * (1972)
Associate Professor, Exercise Science and Sport (1982)
B.S., Concord College
M.S., West Chester State College

Michael Sulzinski (1990)
Professor, Biology (2001)
B.S., The Pennsylvania State University
Ph.D., Cornell University

Delia A. Sumrall (1992)
Associate Professor, Management/Marketing (1995)
B.S., M.B.A., University of Southern Mississippi
D.B.A., Mississippi State University

Terrence E. Sweeney (1992)
Associate Professor, Biology (1998)
B.A., Colgate University
M.S., Ph.D., University of Rochester

Narda Tafuri (1994)
Assistant Professor, Library (1996)
B.A., State University of New York at Oneonta
M.A., New York University
M.S., State University of New York at Albany

Nabil Tamimi (1993)
Associate Professor, Operations and Information Management (1997)
B.S., The Pennsylvania State University
M.B.A., The University of Scranton
Ph.D., Temple University

Charles E. Taylor, C.D.P., D. et.U.* (1974)
Associate Professor, Computing Sciences (1983)
B.S., M.B.A., West Virginia University

Len Tischler (1990)
Associate Professor, Management/Marketing (1997)
B.A., Wabash College
M.B.A., Ph.D., University of Maryland

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Anne Marie Toloczko (1992)
Associate Professor, Counseling and Human Resources (1998)
B.A., M.A., Marywood University
Ph.D., Lehigh University
Licensed Psychologist

Daniel S. Townsend (1987)
Associate Professor, Biology (1992)
Chairperson, Department of Biology
B.A., College of the Holy Cross
M.S., Central Michigan University
Ph.D., State University of New York at Albany

Susan Trussler (1985)
Associate Professor, Economics/Finance (1992)
B.Sc., London School of Economics
M.S., Ph.D., The Pennsylvania State University
A.P.C., New York University

Gretchen Van Dyke (1994)
Associate Professor, Political Science (2000)
B.A., Trinity College
M.A., Ph.D., University of Virginia

Argyrios C. Varonides (1989)
Associate Professor, Physics/Electrical Engineering (1998)
B.S., University of Thessalonika
M.S., Temple University
Ph.D., Drexel University

Joe A. Vinson, D. et U.* (1974)
Professor, Chemistry (1990)
B.S., University of California, Berkeley
M.S., Ph.D., Iowa State University

Janice Voltzow (1996)
Associate Professor, Biology (1998)
B.S., Yale University
Ph.D., Duke Univesity

Robert F. Waldeck (2001)
Assistant Professor, Biology (2001)
B.A., Lehigh University
M.P.A., University of Delaware
M.A., Ph.D., Temple University

Carol Ann Wilkie Wallace, D. et U.* (1981)
Assistant Professor, Communication (1982)
B.A., M.A., Wayne State University
Ph.D., University of Iowa

Roger D. Wallace, D. et U.* (1976)
Associate Professor, Communication (1981)
A.B., Butler University
M.A., Bowling Green University
Ph.D., The University of Michigan

William G. Wallick (1998)
Assistant Professor, Health Administration/Human Resources (1999)
B.S., Marywood University
M.S., The University of Scranton
Ph.D., The Pennsylvania State University

Cheng-Yee Wang (1981)
Publications Librarian (1988)
Assistant Librarian II (1990)
B.A., National Taiwan University
M.L.S., Villanova University
M.S., The University of Scranton

Edward F. Warner, D. et U.* (1964)
Professor, Communication (1980)
Chairperson, Department of Communication
A.B., King's College
M.S., The University of Scranton

Joan M. Wasilewski (1988)
Associate Professor, Chemistry (1994)
B.S., King's College
Ph.D., University of Pennsylvania

Rhonda Waskiewicz, M.S., OTR/L (1998)
Assistant Professor, Occupational Therapy (2000)
Chairperson, Department of Occupational Therapy (2001)
B.S., Tufts University, Boston School of Occupational Therapy
M.S., King's College
Ed.D., Temple University

Gloris Tansits Wenze (1999)
Assistant Professor, Education, (2000)
B.S., Mansfield State College
M.A., California State University
Ph.D., Ed.S., University of New Mexico

Daniel West (1990)
Associate Professor, Health Administration and Human Resources (1994)
Chairperson, Health Administration and Human Resources (2002)
B.S., M.Ed., Ph.D., The Pennsylvania State University

Stephen E. Whittaker (1983)
Professor, English (1994)
B.A., M.A., Ph.D., University of Texas

David A. Wiley (1988)
Professor, Education (1999)
Chairperson, Department of Education (1994)
B.S., M.S., Ed.D., Temple University

Joseph P. Wilson (1985)
Professor, Foreign Languages and Literatures (1999)
B.A., University of Toledo
Ph.D., University of Iowa

Gary N. Wodder, D. et U.* (1974)
Associate Professor, Exercise Science and Sport (1997)
Chairperson, Department of Exercise Science and Sport (1974)
B.S., M.A., Ph.D., Northwestern University

Loreen Wolfer (1996)
Associate Professor, Sociology/Criminal Justice (2002)
B.A., Franklin and Marshall College
M.A., Ph.D., Cornell University

Zhong Cheng Xiong (1988)
Associate Professor, Mathematics (1996)
B.S., Wuhan University
M.S., Ph.D., Lehigh University

Christine A. Zakzewski (1992)
Associate Professor, Physics/Electrical Engineering (1998)
B.S., Rutgers University, Pistcataway
M.S., Ph.D., Rutgers University Graduate School of New Brunswick

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Margarete Lieb Zalon, R.N.C.S. (1988)
Professor, Nursing (2000)
B.S.N., Duke University
M.A., Ph.D., New York University

Joseph R. Zandarski, C.P.A., D. et U. * (1951)
Professor, Accounting (1971)
B.S., The University of Scranton
M.B.A., New York University
Ph.D., University of Pittsburgh

Habib Zanzana (1995)
Associate Professor, Foreign Languages and Literatures (2001)
B.S., M.A., Ph.D., Indiana University

John M. Zych (1991)
Associate Professor, Management and Marketing (1997)
B.S., Worcester Polytechnic Institute
M.B.A., Babson College
D.B.A., Boston University

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Stacy Andes (2000)
Assistant Wellness Director (2000)
B.S., M.A., Marywood University
Mary Kay Aston (1993)
Enrollment Management Information Coordinator (2000)
B.S., Marywood University
M.S., The University of Scranton
David P. Bailey (1998)
Assistant Help Desk Coordinator
Kevan Bailey (1985)
Production Manager, Printing Services (1998)
B.S., The University of Scranton
Luke Benedict (2001)
Network Support Specialist/Asst. MIS Coordinator (2001)
B.S., Clarion University
Janet H. Bennett (1990)
Records Analyst, Registrars Office (1998)
Regina Bennett (1987)
Assistant Dean, Graduate School (1996)
B.A., M.S., The University of Scranton
Peter J. Blazes (1991)
Director of International Student Affairs (1991)
B.A., Widener University
Ed.M., Boston University
Joseph Bochicchio (2001)
Head Women's Soccer Coach (2001)
A.A., Keystone College
B.S., M.Ed., State University of New York at New Paltz
Cheryl Y. Boga, D.et U.* (1981)
Director of Music (1982)
B.M., Marywood University
Gail Bontrager (1996)
Help Desk Technical Coordinator, Information Resources (1996)
B.A., M.P.A., Indiana State University
Geri Maier Botyrius (1992)
Academic Advisor, CAS Advising Center (1992)
A.A., Luzerne County Community College
B.A., King's College
M.S., The University of Scranton
James F. Boyle (1999)
Internal Auditor (1999)
B.S., The University of Scranton
Susan L. Bradley (1991)
Assistant to the Dean, KSOM (1998)
A.S., The Pennsylvania State University
B.S., The University of Scranton
Brenda Brewer (1993)
Senior Women's Administrator/Head Coach, Field Hockey and Women's Lacrosse
B.S., Bloomsburg University
M.B.A., The University of Scranton
Timothy Briggs (2000)
Operations Manager, Public Safety (2000)
Melinda B. Brink (1999)
Assistant Bursar (1999)
B.A., Thiel College
Michael Brumlick (1999)
Postdoctural Research Assistant, Institute of Molecular Biology (1999)
B.S.C., University of Alberta
M.S.C., Ph.D., University of Calgary
William Buckley (1990)
Financial Area Coordinator of Systems Development (1990)
B.S., Bloomsburg University
Christopher Budano (2001)
Director of Student Programming (2001)
B.A., The University of Scranton
Ray Burd (1989)
Director of Printing and Mailing Services (1994)
B.S., Empire State College
M.S., Shippensburg University
William R. Burke (1986)
Director of Financial Aid (1990)
B.S., Bloomsburg University;
M.B.A., The University of Scranton
Lisa Burns (2001)
Clinical Education Coordinator, Occupational Therapy (2001)
B.S., Indiana-Purdue University
Gina Butler (1992)
Assistant Dean, CAS (1995)
B.A., The Pennsylvania State University
M.S., The University of Scranton
Mark Butler (1994)
Education and Training Manager, ECRC (1994)
B.S., The Pennsylvania State University
Eileen Callahan (1994)
Director of Research Services (1996)
B.A., University of Pennsylvania
M.S., The University of Scranton
Laura C. Carroll (2000)
Legal Assistant, Office of General Counsel on Equity (2000)
Maureen Castaldi (1985)
Project/Support Leader, Systems Software Resources (1996)
B.S., The University of Scranton
Patricia Cegelka (2000)
Assistant Director of Financial Aid (2000)
B.A., Kings College
Cheryl Collarini (1980)
Recruiting Coordinator (1997)
B.S., The University of Scranton
Michael D. Collins (1986)
Help Desk Analyst, Information Resources (2000)
B.S., The University of Scranton
Robert Collins (1992)
Director, Systems and Software Resources (1996)
B.S., East Stroudsburg University
Sharon Conway (1988)
Database Management Systems Project Engineer (1996)
B.S., University of Colorado
Carol L. Cornell (1988)
Data Processing Coordinator, Systems and Software Resources (2002)
A.A., The University of Scranton

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Lisa Cornell (1983)
Project/Support Team Leader, Systems and Software Resources (1996)
B.S., The University of Scranton
Kevin Corr (2001)
Admissions Couselor (2001)
B.A., The University of Scranton
Joseph Cortese, SPHR (1990)
Assistant Director/Benefits Manager, Human Resources (1992)
B.S., King's College
M.S., The University of Scranton
Margaret E. Craft (1988)
Assistant Director of Library for Technical Services/Automation/Special Services (1996)
A.B., Central Michigan University
M.A., The University of Scranton
A.M.L.S., University of Michigan
Benjamin Crawford (2000)
Area Coordinator, Residence Life (2000)
B.A., The University of Scranton
Mark Cruciani (1998)
Purchasing Agent (1998)
B.S., The University of Scranton
M.H.A.. Wilkes University
Robert Curley (1994)
Senior Systems Administrator, Systems and Software Resources (1996)
B.S., Fairfield University
M.A., Arcadia University
Joseph Curran (1999)
Director of Liturgical Ministries
B.A., The University of Scranton
Ph.D. cand., Boston College
Paul T. Cutrufello (1998)
Athletic Trainer (1998)
B.S., The Pennsylvania State University
M.S., Bloomsburg University
Carl Danzig (2001)
Head Men's Basketball Coach (2001)
B.A., Baker University
M.A., University of Missouri
Vito G. DelVecchio (1969)
Research Director, Institute of Molecular Biology (1999)
B.A., The University of Scranton
M.S., St. John's University
Ph.D., Hahnemann University
James Devers, AIA (1985)
Director of Physical Plant (1989)
A.A.S., Luzerne County Community College;
B.S., The University of Scranton
Robyn L. Dickinson (1999)
Institutional Research Coordinator (1999)
B.S., Bucknell University
M.Ed., The Pennsylvania State University
Holly Doenges (2000)
Mail Center Supervisor (2000)
A.S., Temple University
Kent Drake-Deese (2000)
Assistant Dean/Director of Residence Life (2000)
B.A., M.Ed., St. Lawrence University
Michel Eschenbrenner (2000)
Postdoctoral Research Assistant, Institute of Molecular Biology (2000)
B.A., M.S., Bourgogne University
Ph.D., Grenoble University
Frank Estock (2000)
Data Management Technician (2001)
Institute of Molecular Biology
Edward C. Evans (2002)
Research Technician, Institute of Molecular Biology (2002)
B.S., King's College
Sharon Evans (1979), D. et U.*
Parking/Traffic Manager (1994)
B.S., East Stroudsburg University
Barbara Evans-Mericle (1990)
National Board Certified Counselor
Counselor, Counseling Center (1990)
B.A., Lockhaven University
M.S., The University of Scranton
Rebekah Ferguson (2001)
Admissions Counselor (2001)
B.A., The University of Scranton
Gustavo Fernandez (1996)
Software Analyst Supervisor, Desktop and Instructional Resources (2000)
B.S., Bloomsburg University
Ned Fetcher (2001)
Research Scientist, Institute of Molecular Biology (2001)
B.A., Harvard University
M.A., University of Wyoming
Ph.D., Colorado State University
Stephen Fisk (1991)
Employment Manager, Human Resources (1991)
B.S., The University of Scranton
Philip Florio, S.J. (2001)
Associate Campus Minister (2001)
B.A., M.S., St. Joseph's University
M.Div., M.Phil., Weston College
Julie Foreman (1993)
Assistant Director, Public Safety (1993)
B.A., Thiel College
B.A., Indiana University of Pennsylvania
James Franceschelli, D. et U.* (1982)
Director, Desktop and Instructional Resources (1996)
A.S., The Pennsylvania State University
Janine Freeman (1987)
Purchasing Systems Administrator (2000)
B.S., The University of Scranton
James Gaffney (1997)
Assistant Director of Operations and Maintenance (1997)
B.S., Kings College
M.S., Naval Postgraduate School
Peter Galbraith (1997)
Executive Director of Development (1999)
B.S., U.S. Naval Academy
Marise Garofalo (1998)
Assistant Director, Alumni Relations (2001)
A.A., B.S., The University of Scranton
Elaine Gayman (1993)
Grant Accountant (1993)
A.S., Luzerne County Community College
B.S., King's College
M.B.A., The University of Scranton

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Stephen Gilbody (1997)
Network Administrator, Network Resources (1997)
A.S., Williamsport Area Community College
Frank Gilmartin (1990)
Career Experience Coordinator (1997)
B.S., M.S., The University of Scranton
Renee S. Giovagnoli-Kurtz (2002)
Research Technician, Institute of Molecular Biology (2002)
B.S., Marywood University
Barbara Gleason, D. et U.* (1982)
Assistant Dean, Kania School of Management (1995)
Director of KSOM Advising Center (1988)
B.S., M.S., The University of Scranton
James Goonan (1987)
Director of Graduate Admissions (1990)
B.S., M.B.A., The University of Scranton
Lucia Granito (1983)
Assistant to Comptroller (1983)
B.S., M.B.A., The University of Scranton
Sharon Grasso (1985)
Assistant Dean, Director of Advising Center, DHC (1995)
B.S., M.A., The University of Scranton
John Greggo (1997)
Director, Counselor Training Center (2000)
B.S.W., Mansfield University
M.S.W., Marywood University
Andrew Gregorwicz (2001)
Financial Analyst (2001)
B.S., The University of Scranton
Eugeniu Grigorescu (1998)
Institutional Technical Support Analyst (1998)
B.A., M.S., Bloomsburg University
Barbara Griguts (1991)
Academic Counselor, KSOM Advising Center (1991)
B.A., The Pennsylvania State University
M.S., The University of Scranton
Albert A. Guari (1998)
Manager of Training and Development, SBDC (1998)
B.S., The University of Scranton
M.B.A., Monmouth College
Judith Gunshannon (1995)
Secretary, President's Office/Board of Trustees (1995)
William Gunshannon (1989)
Departmental Systems Administrator (1992)
Denise Gurz (1995)
Programmer Analyst (1999)
B.S., Bloomsburg University
Adrienne Hamson (2001)
Admissions Counselor (2001)
B.S., The University of Scranton
Scott D. Harron (1998)
Computer Instructor/Trainer, Center for Continuing Education (1998)
A.A., Community College of the Air Force
B.S., Bellevue College
Jamesina C. Hayes (1999)
Office/Operations Manager, Student Affairs (2000)
Karen Heckman (1989)
Media Resources Collection Supervisor (1993)
A.A., B.S., The University of Scranton
Judith R. Henning (1988)
Director, Learning Resources Center (1988)
B.S., M.S., Marywood University
Kimberly Hepler (2000)
Compensation/HRIS Specialist, Human Resources (2000)
B.S., Kings College
M.B.A., The University of Scranton
Larry J. Hickernell (1984)
Webmaster, Special Projects Manager, Network Resources (1996)
A.S.B., Central Pennsylvania Business School
B.A., The University of Scranton
Terry Hocking (1990)
Software Analyst, Systems and Software Resources (1996)
A.S., Lackawanna Junior College
Kathryn Holecko (1992)
Project Program Coordinator, Continuing Education (1996)
Mary Beth Holmes (1992)
Director of Radio and Television (1996)
B.A., The University of Scranton
M.S., Ph.D. cand., Syracuse University
Troy A. Horn (1998)
Research Technician, Institute of Molecular Biology (1998)
B.S., King's College
Diana Howe (2001)
Academic Advisor, Panuska College Advising Center (2001)
B.A., St. Lawrence University
M.S.W., Marywood University
Cindy Hricko (1985)
Project/Support Team Leader, Systems and Software Resources (1996)
B.S., M.S., The University of Scranton
Margaret Hynosky (1993)
Associate Director of Financial Aid (2000)
B.A., The University of Scranton
Diane Jachimowicz (1999)
Software Analyst, Desktop and Instructional Resources (1999)
B.A., Millersville University
Erin Jennings (2002)
Area Coordinator, Residence Life (2002)
B.Mus., Moravian College
Jane Johnson (1990)
Associate Director, Intramurals/Recreation (2000)
B.S., Marywood College
M.S., The University of Scranton
Karen Jones (1992)
Assistant Registrar (1995)
B.A., Wilkes University
Lisa Jones (2001)
Admissions Counselor (2001)
B.S., The University of Scranton
Rose Ann Jubinski (1984)
Project/Support Team Leader, Systems and Software Resources (1996)
B.S., M.B.A., The University of Scranton
Annette Barosi Kalwaytis, D. et U.* (1982)
Library Associate Circulation Supervisor (1985)
B.S., M.S., The University of Scranton

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Ellen L. Kanavy (1997)
Assistant to the Rector (1998)
B.A., Marywood University
M.S., The University of Scranton

Theresa Kaplan (1988)
Assistant Director, SBDC (2001)
B.S., M.S., The University of Scranton

Marie Karam (1988)
Director of the Language Learning Center (1994)
B.A., Marywood University;
M.A., The Pennsylvania State University

Paulette Karlavige (1989)
Payroll Manager (1995)

Ann Kazmierski (1987)
LAN Administrator/Lab Support Analyst, Desktop and Instructional Resources (1998)

Robert Klem (1987)
Software Analyst, Systems and Software Resources (1996)
B.S., Marywood University

Kathleen R. Kopcik, N.C.C., D. et U.* (1974)
National Board Certified Counselor Counselor, Counseling Center (1974)
B.A., Marywood University
M.S., The University of Scranton

Mary A. Kovalcin (1998)
Library System Specialist, Library (2000)
B.A., College Misericordia

Christopher Krall (1994)
Systems Administrator, Systems and Software Resources (1996)
A.S., The Pennsylvania State University
B.S., The University of Scranton

Scott Kramer (2001)
Financial Aid Counselor (2001)
B.A., Bloomsburg University

Francis Kranick (1994)
CAD Operator/Draftsman (1994)
A.S., Johnson School of Technology

Jo Ann Kraycer (2000)
Research Technician, Institute of Molecular Biology (2000)
B.S., The Pennsylvania State University

Marc Kudrich (1997)
Bursar (1997)
B.S., M.S., The University of Scranton

Anthony J. Laboranti (1990)
Supervisor, Building/Grounds (1990)

Brendan G. Lally, S.J. (1986)
Associate Campus Minister (1986)
B.S., The University of Scranton
M.Div., Weston School of Theology
M.P.S., Loyola University

Ruth Lancia, R.N.C. (1991)
Nurse, Student Health Services (1991)
R.N., Presbyterian University of Pennsylvania Medical Center
B.S., The University of Scranton

Jason Langdon (2001)
Associate Director of Admissions (2001)
B.A., Wilkes University

Zim E. Lawhon, D. et U. * (1964)
Registrar Emeritus (1989)
Advisor, Academic Advising Center (1989)
Col., U.S. Army-Ret.
Professor of Military Science (1964)
A.B., M.S., Princeton University

Robert S. Legutko, (2001)
Assistant Dean/Director of Credit Programs, Dexter Hanley College (2001)
B.S., Bloomsburg University
M.Ed., The Pennsylvania State University
Ed.D., Wilmington College

Arch Leombruni (2000)
Web/Internet Development Specialist (2000)
B.S., The University of Scranton

Eloise Libassi (1996)
Grants Information Specialist (1996)
B.A., University of Maryland
M.A., Boston College

Francene Liples (1992)
Senior Designer, University Publications (1997)
B.F.A., Marywood University

Cathy Lovecchio (1998)
Director of Health Education and Wellness (1998)
B.S.N., Villanova University
M.S.N., College Misericordia

Toby Lovecchio (1997)
Director of Athletics (1997)
B.S., The University of Scranton
M.Ed., Temple University

James Loven (2000)
Laboratory Equipment Manager (2000)
B.S., The Pennsylvania State University

Kristin Maile (1995)
Financial Manager/Business Consultant, SBDC (2000)
B.S., The University of Scranton
M.S., The University of Scranton

Lorraine Mancuso, D. et U.* (1982)
Assistant Director, Systems and Software Resources (1996)
B.S., M.B.A., The University of Scranton

Catherine Marshall (2000)
Coordinator of Admissions for part-time, adult, and transfer students (2002)
B.A., Appalachian State University

Carolyn F. Matrone (1989)
Program Coordinator, Continuing Education (1998)

Alan Mazzei (1994)
Senior Development Officer (2000)
B.A., The University of Scranton

Mary Ann McAndrew (1981)
Assistant Director, Learning Resources Center (1995)
B.S., M.S., The University of Scranton

Donald McCall (2001)
Assistant Help Desk Coordinator, Information Resources (2001)
B.S., Baptist Bible College

Susan McCrea (1988)
Systems Coordinator for Residence Life (1996)

Constance E. McDonnell (1983)
Assistant Director, Career Services (1983)
B.A., University of Denver
M.A., Marywood University

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Aileen McHale (1988)
Assistant Director, Desktop and Instructional Resources (1998)
B.S., King's College
John F. McNamara, D. et U.* (1975)
Comptroller (1982)
B.S., The University of Scranton
Margaret McNulty (2000)
Director of Corporate and Foundation Relations (2000)
B.S., M.S., The University of Scranton
Patricia Mecadon (1955)
Production Manager, University Press (2000)
Barbara C. Mericle (1990)
Counselor, Couseling Center (1999)
B.A., Lock Haven University
M.S., The University of Scranton
Vincent Merkel D. et U.* (1978)
Senior Consultant, Desktop and Instructional Resources (1996)
B.S., The University of Scranton
Christian Merz (2000)
Research Technician, Institute of Molecular Biology (2000)
B.S., Kings College
Darlene Miller-Lanning (1991)
Director, University Art Gallery/Adjunct Professor History Department (1998)
B.F.A., Wilkes University
M.F.A., Marywood University
Ph.D., Binghamton University
Ellen Morgan, N.C.C. (1990)
Counselor, Counseling Center (2000)
B.S., M.S., The University of Scranton
William Morris (1991)
Program Manager, - ECRC (1998)
B.S., The University of Scranton
Danielle L. Morse (1991)
Software Support Analyst/ WAN Support, Desktop and Instructional Resources (1996)
B.S., Wilkes University
Lawrence J. Morton, D. et U. * (1969)
Assistant to Vice President for Student Affairs (1992)
A.B., St. Bonaventure University
M.S., Syracuse University
M.S., The University of Scranton;
D. Ed., The Pennsylvania State University
Barbara Moss (1997)
Biology Lab Supervisor (1997)
B.S., M.S., The University of Scranton
Jennifer Mroz
Assistant Athletic Trainer (1999)
B.S., Lock Haven University
M.S., Michigan State University
Cesar Mujer (2000)
Proteomics Scientist, Institute of Molecular Biology (2000)
B.S., M.S., University of the Philippines at Los Banos Laguna
Ph.D., Ohio State University
William Mulligan (1998)
Associate Campus Minister, Director of Liturgical Music (1998)
B.M., M.M., Florida State University
Andrea J. Mulrine (1998)
Database Management Systems Specialist (2000)
B.S., The University of Scranton
James Muniz (1990)
Director of ADP/DPD, Reading Specialist (1997)
B.S., Kutztown State College
M.S., Marywood University
M.S., The University of Scranton
Mark Murphy (1991)
Assistant Director of Utilities,Plant Engineer (1998)
B.S.E.E., Wilkes University
Maureen J. Murtha (1998)
Pre-College Programs Coordinator, University of Success Program (1998)
B.S., M.S., The University of Scranton
M.A., Marywood University
JoAnn Nicoteri (1985)
Family Nurse-Practitioner, Student Health Services (1995)
B.S.N., University of Pennsylvania
M.S., F.N.P., Binghamton University
Barbara Nimerosky (1999)
Director of Field Placement (1999)
B.S., The Pennsylvania State University
M.S., The University of Scranton
Mark Noll (1997)
Prospect Researcher (1997)
B.A., King's College
Joseph D. Notari (1998)
Regional Development Director (1998)
B.A., The University of Scranton
Lisa Notarianni (1991)
Manager, Business and Telecommunication Services, Network Resources (1996)
A.S., Lackawanna Junior College
Beverly O'Hara (1992)
Secretary to Dean/Office Manager (2001)
Dexter Hanley College
Erin O'Malley (2001)
Coordinator, Freshman Residential College (2002)
B.S., The University of Scranton
Anthony Pamelia (1994)
Physics Lab Staff (1994)
B.S., M.S.,The University of Scranton
M.S., Weston School of Theology
M.S., University of Massachusetts at Lowell
G. Donald Pantle, S.J., D. et U. * (1980)
Associate Campus Minister (1980)
B.A., Bellarmine College
M.A., Middlebury College
Frank D. Parker, D. et U. * (1969)
Purchasing Agent, Purchasing Department (1991)
B.S., The University of Scranton
Barbara Parkman (1998)
Coordinator, Nonprofit Resource Center (1998)
B.S., Williams College
Margaret Parsons (1996)
Academic Advisor/Counselor, KSOM Advising Center (1996)
B.S., The Pennsylvania State University
M.A., The University of Scranton

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Guy Patra (1998)
Pro-Karyote Genotype Scientist, Institute of Molecular Biology (1998)
M.S., Ph.D., University of Paris

Susan E. Patten (1994)
Classroom and Schedule Coordinator, Registrar's Office (1998)

Rhett Perdew (2000)
Evening Systems Specialist, Library (2000)
B.A., The University of Scranton

Paul Perhach, D. et U.* (1982)
Director of Career Services (1982)
B.A., King's College
M.S., Marywood University

Joseph Perri (1996)
Web/Systems Analyst-ECRC (1998)
B.S., Marywood University

Harold Phillips (1997)
LAN Administrator/Lab Support Analyst (1998)
A.S., Keystone College

Matthew Pivirotto (2001)
Head Men's Soccer Coach (2001)
B.A., Lycoming College

Richard Pomager (2000)
Director of Public Safety (2000)
B.S., The Pennsylvania State University
M.A., Sam Houston State University

Patricia Popeck, R.N., M.S. (1987)
Director of Student Health Services (1987)
B.S., University of Virginia
M.S., The University of Scranton

Dianne Posegate (1993)
Assistant Dean/Director, Academic Advising Center - Panuska College (1998)
B.S.N., Alfred University
M.S., University of Rochester

Terri Proctor (1988)
Manager, Information Center & ID Card Services, Network Resources (1996)
B.S., The University of Scranton

Deborah Pugh (1999)
Adminstrative Manager, Institute of Molecular Biology (1999)
B.S., State University of New York at Binghamton

Carol Radle (1996)
Budget Manager, Treasurer's Office (1998)
B.S., Marywood University
M.B.A., The University of Scranton

Elizabeth Randol (2001)
Director, Women's Center (2001)
B.A., Washington & Lee University
M.A., North Carolina State University
Ph.D., Binghamton University

Magdalene Restuccia (1980), D. et U.*
Interlibrary Loan Coordinator (1999)

Raymond Rignanesi (1997)
Senior Network Administrator (1997)
B.S., The Pennsylvania State University

Joseph Roback (2000)
Director of Admissions (2000)
B.S., Marywood University
M.S., The University of Scranton

Sr. Joan L. Roccasalvo, D. et. U.*, C.S.J. (1976-81, 1986)
Coordinator, Eastern Christian Studies (1986)
B.Mus., Alverno College
M.A., New York University
M.A., Seton Hall University
Advanced Studies, Villa Schifanoia Graduate School of Fine Arts, Florence, Italy
Ph.D., The Catholic University of America
M. Phil., Ph.D., Drew University

Maryjane S. Rooney (1989)
Associate Director Alumni Relations (1997)
B.S., The University of Scranton

Richard Rousseau, S.J. (1979)
Director, University Press (2001)
B.A., M.A., M.A., Boston College
S.T.L. Faculties St. Albert de Louvain
Ph.D., St. Paul's University, Ottawa

Elizabeth A. Rozelle (1989)
Career Development Coordinator (1997)
B.A., Bloomsburg State College
M.S., The University of Scranton

Mollie Ruffenach (1988)
Assistant Director, Network Resources (1996)
B.S., M.S., The University of Scranton

Carol A. Ruggiero (1989)
Registered Nurse, Health Services (1998)
B.S., The University of Scranton

Andrea Russo (2001)
Annual Fund Specialist (2001)
B.S., M.S., The University of Scranton

Carolyn Santiso (1989)
Annual Fund Specialist (1995)
B.A., The University of Scranton

Madonna Savage (1985)
Office Manager/Coordinator of Scheduling (1993)

A. Noreen Schofield (1994)
Assistant to the Dean, CAS (2000)
B.S., Marywood University

Catherine Seymour (1992)
Associate Campus Minister (1992)
B.S., M.A., The University of Scranton

Lynn Sfanos (1997)
Graphic Designer (1997)
B.S., Cornell University
M.S., Indiana State University

Michael Simons (1994)
Study Abroad Advisor (1994)
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Business Consultant/Manager of Special Projects-SBDC (1995)
B.S., B.A., Auburn University
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Director, Network Resources (1996)

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Assistant to the President (2000)
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Research Analyst, AIRO (2001)
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National Association for Women in Catholic Higher Education
National Association of Boards of Examiners of Nursing Home Administrators
National Association of Graduate Admissions Professionals
National Association of Independent Colleges and Universities
National Catholic Education Association
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National Council on Rehabilitation Education
National League for Nursing
National Organization of Nurse Practitioner Faculties
Northeastern Pennsylvania Independent Colleges
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